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PATIENT AND FAMILY PARTICIPATION IN
NURSING CARE: THE DEVELOPMENT OF A
NURSING PROCESS MEASURING SCALE

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THESIS SUBMITTED FOR THE DEGREE OF
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1 9 8 6



ABSTRACT

The theoretical and empirical framework for the study was derived from work in nursing, psychology, sociology and philosophy.

A survey of 114 patients, 72 relatives and 107 nurses was carried out in two hospitals. This examined current practices, opinions and attitudes towards patient and family participation in nursing. Wards were compared according to whether or not nursing process was in use. Data concerning the validity and reliability of the scales are presented.

In summary it was found that patients and relatives reported little participation in planning and implementing care and wanted increased participation. Those who held most positive attitudes and reported high levels of participation tended to be middle class, well educated, knowledgeable about the patient's condition and familiar with hospitals. There was very little relationship between the use of nursing process and attitudes and practices concerning patient and family participation.

Nurses reported generally positive attitudes towards patient and family participation and nursing process. Those with most positive attitudes tended to be older and more senior. Although many nurses claimed to encourage patient and family participation, there was little evidence that they actually did. None of the wards or units had policies about patient and family participation. Nurses reported that little was taught about these issues during training.

The development of a scale to quantify the use of nursing process in general wards is described. Content validity was checked by reference to the literature and a panel of subject experts. Methods of data collection, validity, reliability and sensitivity were tested in eight wards in one hospital, including an 18 month follow-up of two wards.

Recommendations for further research include a proposal for a field experiment. This aims to examine the effects of increasing patient and family participation at all stages of the nursing process.

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LIST OF ABBREVIATIONS

| | |
|----------------------|------------------------------------------|
| BP | Blood Pressure |
| CHC | Community Health Council |
| DHSS | Department of Health and Social Security |
| GNC | General Nursing Council |
| GP | General Practitioner |
| H1 H2 H3 H4 | Hospitals 1, 2, 3 and 4 |
| | |
| | |
| | |
| HMSO | Her Majesty's Stationery Office |
| NHS | National Health Service |
| NO | Nursing Officer |
| NP | Nursing Process |
| Rcn | Royal College of Nursing |
| SEN | State Enrolled Nurse |
| SN | Staff Nurse |
| SNO | Senior Nursing Officer |
| SRN | State Registered Nurse |
| UNICEF | United Nations Children's Fund |
| USA | United States of America |
| W1, W2... | Ward 1, Ward 2... |
| | |
| WHO | World Health Organization |

Statistical abbreviations

| | |
|--------------------|------------------------------------------------------|
| < | Less than |
| > | Greater than |
| ANOVA | Analysis of Variance |
| df | Degrees of Freedom |
| No | Number |
| n | Number of |
| NS | Not significant |
| SD | Standard Deviation |
| SPSS | Statistical Package for the Social Sciences |
| The Kendall w | - The Kendall Coefficient of Concordance |
| The Kendall r | - The Kendall Rank Correlation Coefficient (tau) |
| The Pearson r | - The Pearson Product-Moment Correlation Coefficient |
| The Spearman r_s | - The Spearman Rank-Order Correlation Coefficient |

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I was awarded a Chelsea College post-graduate studentship from 1979 to 1982, without which the study would have been impossible, and for which I am most appreciative.

PART 1: INTRODUCTION, LITERATURE REVIEW AND METHODS

PART 1. CHAPTER 1.INTRODUCTION

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PART 1. CHAPTER 1. INTRODUCTION

1.1 Reasons for the study and initial formulation of the problem.

This study originated from the researcher's observations during clinical practice that patients and their families in general hospitals often adopted passive and dependent roles. This behaviour appeared to result from their expectations about appropriate behaviour; their uncertainty in a strange environment; and the behaviour of hospital staff which seemed to reinforce acquiescence. The researcher questioned whether passivity was widespread and if it was in the best interests of patients and their families.

In recent years it has been widely proposed that patients and their families should be more involved in decision-making about care and the delivery of care. This view also seemed to be an assumption of the nursing process (NP), which is being developed in some British hospitals. The idea of giving patients control over their care has become fashionable and fits in with other social trends, such as the general upsurge of consumerism and interest in nursing ethics and patients' rights. The extent to which the notion of increasing patient and family participation has actually been incorporated into nursing practice is questionable. More importantly, the effects of these recommendations have never been systematically evaluated.

Early in this study it was intended to carry out a field experiment to examine the effects of increasing patient and family participation at all stages of the NP on recovery and welfare. It was also hoped to investigate the effects of individual difference variables on patients' and relatives' responses to increased responsibility and control.

In view of the paucity of empirical work in this area, it was necessary to begin by assessing current nursing practices and attitudes. The following questions were seen to be important and relevant:

1. To what extent do patients and their relatives currently participate in the assessment, planning and implementation of nursing ?
2. What are the attitudes of nurses, patients and relatives towards patient and family participation in nursing ?
3. Do wards and units have policies about patient and family participation in care ?
4. What are nurses taught about this topic ?

5. What is the relationship between the use of NP and patient and family participation in care ?

After consideration of several research methods which could be used to answer these questions, a questionnaire survey of patients, relatives and nurses was carried out in two hospitals. To answer the fifth question differences between wards which were and were not using NP had to be examined. Early pilot work showed that it was not sufficient to rely on reports from ward staff about the use of NP as the concepts were variously interpreted. Objective indicators were needed, but a search of the literature failed to reveal any criteria against which the use of NP could be measured. It was therefore necessary to develop a scale which could be used to discriminate among wards according to how fully the NP was being used.

Development of an NP measuring scale was accordingly the second major part of the research. There was consequently insufficient time available to carry out an experimental manipulation of patient and family participation. Plans for this and other further research are presented at the end of the thesis.

1.2 Outline of the thesis

The thesis is divided into four parts, each of which is subdivided into between three and five chapters. Part One contains a review of the literature and a chapter on the research methods. Parts Two and Three describe the empirical work; Part Two concerning the survey of patient and family participation and Part Three describing the development of a scale to measure the use of NP. Although this division was in the interests of clarity, it is to some extent artificial, as the two empirical components are closely related. Part Four contains a general discussion of the research, detailed suggestions for further work and conclusions. The appendices are arranged according to Part. Although the Table of Contents lists only the titles of the chapters, the detailed contents of chapters are listed at the beginning of each chapter.

Doubts can arise about the meaning of traditionally accepted concepts such as nurse and patient as well as more obviously ambiguous concepts such as patient control and nursing process. It is therefore necessary to define these concepts in the context of this study. Throughout the empirical sections new words are operationally defined so that their meanings are clear.

Inevitably, this study includes some assumptions that are not tested, but whose correctness is taken as self-evident. As far as possible these are made explicit in the relevant sections, where the basis of their assumed validity is considered.

1.3 Conduct of the study

Most of the empirical work was carried out between October 1979 and September 1982, while the researcher was supported by a Chelsea College post-graduate studentship. During the validity and reliability testing of the NP measuring scale assistance with data collection was given by a Chelsea College fourth year nursing undergraduate. The researcher worked alone during all other parts of the study.

1.4 Introduction to the literature survey

It may be seen from the Table of Contents that literature from a wide range of disciplines is reviewed. There have been few previous studies of patient and family participation in nursing, therefore it was necessary to examine more generally consumer participation in hospital and community health care. This material is contained in Chapter Three. However, the theoretical underpinnings for consumer participation in health care are derived from concepts developed in psychology and sociology. These concepts are discussed in Chapter Two. Chapter Four is concerned entirely with nursing. There is an extensive review of literature on the NP, which provides background to the development of the NP measuring scale. As the scale is a method of evaluating an aspect of nursing, Chapter Four also reviews literature on the evaluation of nursing practice. As the focus of this thesis is nursing, it is essential to examine theories of nursing and consider their relevance to the study. This is also contained in Chapter Four.

This literature review provides the general theoretical framework for the study. Much nursing research has tended to be atheoretical (Abdellah and Levine, 1979) which may have limited its ability to advance scientific knowledge (Batey, 1977). In this study the conceptual structure was used to guide selection of the questions studied and the collection and interpretation of data, as recommended by Lenz (1982). This is termed deductive or theory testing research (Schwab, 1964) as opposed to inductive or theory building research exemplified by the work of Glaser and Strauss (1967).

PART 1. CHAPTER 2.PSYCHOLOGICAL AND SOCIOLOGICAL CONCEPTS : A REVIEW

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PART 1. CHAPTER 2.

PSYCHOLOGICAL AND SOCIOLOGICAL CONCEPTS : A REVIEW

This chapter deals with some psychological and sociological concepts which form the theoretical base to the subject of patient and family participation in health care. The section on psychological concepts is mainly concerned with personal control as a means of reducing stress. The sociological section is concerned with the roles of patient and family, patient satisfaction, and relationships between care providers and the patient or patient's family.

2.1 PSYCHOLOGICAL CONCEPTS

This section examines the premises fundamental to this research, that being ill and in hospital are stressful, and that the exercise of personal control over care may, under certain circumstances, help patients to cope with stress.

In this section the nature of stress and how stress may relate to illness are briefly examined. The psychology of personal control is analysed in detail, including its philosophical antecedents and various types of control. Mechanisms by which control reduces stress are considered and complex issues such as circumstances under which control is relinquished and effects of control that is difficult to exercise are discussed. Finally personality variables such as locus of control, self-efficacy, helplessness etc. which may influence the exercise of personal control are outlined and relationships among them considered.

2.1.1 The concept of stress

The study of stress was formalised by Cannon (1914) and further developed in the physiological theory of Selye (1956,1976). On the basis of observational studies Selye described a three stage General Adaptation Syndrome. The first stage, alarm, is accompanied by sympathetic nervous system activation. During the second stage, resistance, activation ceases and maximum adaptation occurs. The third stage, exhaustion, arises when stress persists, adaptive reserves are depleted and physical and psychological morbidity occur.

Sources of stress have been classified by Lazarus and Cohen (1977) into:

- cataclysmic events, such as wars and hurricanes;
- personal stressors, such as bereavement and unemployment; and
- background stressors, which are persistent, repetitive and low intensity, such as job dissatisfaction (Frankenhaeuser and

Gardell, 1976); commuting (Singer et al, 1978); and chronic noise exposure (Cohen, 1980).

Lazarus (1975) emphasised the role of appraisal in determining stress responses and experiments have shown that unless a situation is perceived as threatening, stress is not experienced, irrespective of the objective danger (Speisman et al, 1964, Lazarus et al, 1965).

A number of mediating variables have been identified as influencing the perception of stress and hence reactions to it. These include predictability (Badia et al, 1973); general beliefs such as locus of control, helplessness and self-efficacy; specific beliefs about personal control (Lazarus, 1966); social support (Cobb, 1976); perception of risk; and dispositional variables such as Type A personality (Glass, 1976).

The physiological response to stress described by Selye (1956, 1976) is also accompanied by behavioural, cognitive and emotional responses. Attempts at coping with the source of stress may be accompanied by anxiety, depression, increased symptom reporting, decreases in problem solving abilities and heightened aggressiveness (Cohen, 1980).

Thus it can be seen that stress is a "transaction between people and the environment" (Lazarus and Launier, 1978). It is an interactive psycho-physiological process involving potential stressors, appraisal processes, coping mechanisms, and potentially pathological end-states.

2.1.2 Stress and illness

The evidence for a link between stress and illness is considerable (Eliot and Buell, 1979; Reynolds, 1974; Bettelheim, 1960). The behavioural links to illness have been classified into three basic mechanisms by Krantz et al (1981). These are direct psycho-physiological effects, health impairing life-style, and reactions to illness. Each will be considered in turn.

Psycho-physiological or psycho-somatic illnesses are a group of disorders manifesting physical dysfunction in which psychological factors may exert a causative role (Linford Rees, 1976). Selye (1956) administered stress hormones (corticosteroids) to animals and found resulting heart and kidney pathology. He reasoned that these hormones mimicked the effects of constant stress. Common psychosomatic disorders include asthma, peptic ulcer, migraine, menstrual disorders, coronary artery disease, colonic disorders, rheumatoid arthritis, hay fever, hypertension, hyper-thyroidism and diabetes mellitus (Linford Rees, 1976).

There is however no simple relationship between stress and particular disorders (Levi, 1974). Factors such as personality, environment, genetic

and biochemical predisposition, reactivity of the autonomic nervous system and external pathogens all interact with stress to produce pathological changes in a specific organ (Linford Rees, 1976).

Life style and coping style are important because they help to determine the impact of stress and they may bring about habits which predispose to illness. Type A personality is a coping style characterised by aggressiveness, competitiveness, time urgency, overwork and the pursuit of multiple goals. Type A personality has been found to be an important determinant of coronary artery disease in men (Rosenman et al, 1964; Jenkins et al, 1971; Jenkins, 1978). The occurrence of both pleasant and unpleasant social changes has been studied in relation to illness. Adjustment to "life events" can be seen as a component of stress (Holmes and Rahe, 1967). There appears to be considerable evidence for the link both from retrospective (Garriety and Marx, 1979) and prospective studies (Rahe et al, 1967).

Stress is not only a precursor of illness as discussed above, but can be considered as a reaction to illness. Thus the relationship is reciprocal. Reviewing the research literature, Wilson-Barnett (1979) concluded that admission to hospital is a very stressful event. Factors which generate anxiety include concern over the illness and treatment, concerns over adjustment to the new environment and the role of patient, and learned fears of hospitals. High levels of anxiety have been found in newly admitted patients (Franklin, 1974; French, 1979) and women have been found to be more anxious than men (Vetter et al, 1977), especially women aged under forty (Wilson-Barnett and Carrigy, 1978).

Reviewing the literature on personality and surgical recovery Mathews and Ridgeway (1981) found some evidence that high trait anxiety or neuroticism was associated with more distress and slower recovery. They argued that links could be explained in terms of effects on subjective distress or on patients' involvement in behaviour which may promote recovery, or on physiological and immunological mechanisms. Similarly Cassell (1974) claimed that lack of evidence that one's actions are leading to anticipated consequences is one of the major stress contributions to illness. Thus patient participation in care can be seen as highly relevant to the experience of stress in hospital.

2.1.3 The psychology of personal control

In this section it is argued that control is an important mediator of stress. Research has shown that being able to control an aversive event, or believing that the event, or other aspects of the environment can be controlled may reduce the impact of a stressor (Gatchel and Baum, 1983).

2.1.3.1 Philosophical antecedents: Free will versus determinism

The problem of whether humans control their own destiny or are controlled by external factors has concerned philosophers for centuries.

Determinism is the view that there is no human freedom. Several arguments have been proposed to support that position. Firstly, divine determinism which claims that God is the sole causal agent has been advocated in religious writing, for example the American Calvinist, Edwards (). Secondly, the metaphysical basis for determinism derives from the notion that every event must have a cause, including mental events such as decisions (Hume, 1739). Later, behaviourists claimed that all behaviour is determined by reinforcement contingencies (Skinner, 1938). The strongest evidence for determinism is the mass of information in physiology, neurology, pharmacology and psychology that enables behaviour, affect and cognitions to be predicted with a high degree of accuracy.

A deterministic view of the nature of man is allied to the philosophy of mechanism, the view that the body is analogous to a machine operating according to physical laws (Descartes, 1637). This led to mechanistic conceptions of disease, a model which places the patient in a position of passive submission to the disease and health carers.

The proponents of the belief in free will have also formulated supporting arguments. Firstly, libertarians claim that there is a subjective experience of freedom when decisions are made. Secondly, Judaeo-Christian theology offers man salvation from Original Sin, which must require free action. A third argument proposed by James (1957) is that human experiences of remorse and guilt, and the attribution of responsibility and punishment for wrong-doings, make sense only if self-determination is possible. Another argument is that consideration of the issue of free will and determinism assumes the freedom to make rational judgments and decisions. Belief in free will implies a more humanistic view of man than determinism allows and is more compatible with patient and family participation in care.

2.1.3.2 Early psychological work

For decades psychologists have asserted that humans are motivated to achieve mastery over their environment (Erikson, 1950; Piaget, 1952) and have emphasised the importance of prediction and control (Kelly, 1955). Adler (1930) wrote about overcoming helplessness and the development of mastery. He described the need to control the environment as "an intrinsic necessity of life itself". De Charms (1968) wrote that:

"man's primary motivational propensity is to be effective in producing changes in his environment. Man strives to be a causal agent".

Lefcourt (1973) in response to Skinner's (1971) deterministic behavioural position wrote:

"the sense of control, the illusion that one can exercise personal choice, has a definite and positive role in sustaining life".

White (1959) considered that much infant behaviour was motivated by a biological drive to learn how to deal competently with the environment. This concept has been developed by recent workers in child development (Schaffer, 1977).

The classic study concerned with control was an experiment by Mowrer and Vieck (1943). They demonstrated that rats exhibited less fear of an aversive stimulus when they could exercise control in terminating it. The findings of the famous "executive monkey" experiments (Brady et al, 1958) appeared to contradict earlier findings and concluded that decision-making was stressful and led to ulcer formation. However, Weiss (1972) identified a methodological flaw in the work of Brady et al (1958) which discredited their findings. Weiss (1968, 1971) found that having the ability to make an effective response was important in preventing ulcers in rats.

Thus early research and the ideas of early psychologists suggested that personal control is important. In the next section recent empirical studies of control will be discussed. These attempt to disentangle the many components of control and examine their effects on a variety of outcomes.

2.1.3.3 Components of control

Control was defined by Baron and Rodin (1978) as:

"the ability to regulate or influence intended outcomes through selective responding".

The terms control and controllability are used in research in various ways. Miller (1979) considered that control research involved instrumental control, self-administration and potential control.

Instrumental control is that in which the subject is able to make a response that actually modifies the aversive event. A variant is perceived instrumental control in which the subject believes that control can be exercised. Baron and Rodin (1978) defined perceived control as:

"expectations of having the power to participate in making decisions in order to obtain desirable consequences".

Self-administration is the type of control in which subjects deliver aversive events to themselves. Potential control is when subjects believe that some controlling response is available to them, but refrain from using it.

Averill (1973) distinguished three types of personal control which he identified as: behavioural - direct action on the environment;

cognitive - the interpretation of events; and decisional - having a choice among alternative courses of action. Averill (1973) considered that each type of control is related to stress in different and complex ways, and in all cases the meaning of the control response for the individual is important.

2.1.3.4 Actual and perceived control

In a wide variety of experimental settings, psychologists have shown that personal control over an impending harm helps to reduce stress reactions. A large amount of research shows that the ability to control aversive events reduced subjects' physiological arousal (Szpiler and Epstein, 1976; Kanfer and Seider, 1973; Staub et al, 1971). The area was reviewed by Averill (1973).

However, irrespective of whether or not control actually is or can be exercised, it appears that the perception of control is crucial in reducing arousal. Geer et al (1970) found that subjects who believed they had control showed less physiological response to electric shock than subjects who did not believe they had control.

Choice is another aspect of control that affects stress reduction. Both Stotland and Blumenthal (1964) and Corah and Boffa (1970) found that giving subjects choices decreased the aversiveness of a threatening stimulus, apparently by increasing perceived control.

A study by Glass et al (1969) emphasised the importance of potential control in reducing anxiety, even if the control is never exercised. They provided subjects with buttons which could be used to terminate aversive noise if absolutely necessary. A control group had no such option. No subjects pressed the buttons, but potential control produced the predicted differences on test performance after the noise terminated.

Although it is illusory, self-administration of aversive events also offers subjects the perception of control (Miller, 1980). Evidence of preference for or reduced arousal under self-administration rather than experimenter-administration, was provided by Pervin, (1963); Staub et al (1971); and Ball and Vogler (1971).

Most of the literature focuses on aversive events and little is known about how people react to controlled versus random positive events. Lanzetta and Driscoll (1976) examined preferences for information about a potential outcome as a function of whether it was negative (shock) or positive (monetary reward). They found that subjects preferred to have information as opposed to no information, regardless of potential outcomes. They interpreted information as a form of cognitive control.

2.1.3.5 Prediction and control

It has frequently been found that unpredictable aversive events, such as electric shock and noise, are more stressful both for people (Glass et al, 1969; D'Amato and Gumenik, 1960) and for animals (Badia et al, 1973) than similar predictable events. Given choice, most people select predictable rather than unpredictable aversive stimuli, even if they are more painful (Seligman et al, 1971).

A major criticism of work in this area is that behavioural control has been confounded with prediction in many experiments. It is therefore uncertain whether beneficial effects are due to control or increased prediction (Averill, 1973). For example, in self-administration experiments, subjects with control can of course also predict the event. A few studies have kept prediction and control methodologically distinct. For example, Geer and Malsal (1972) showed two groups of subjects photographs of corpses, preceded by a warning tone. Both groups could predict the onset and duration of the slides. One group of subjects were able to switch off the slides if they became too aversive. The group with control had lower galvanic skin responses (a measure of stress) than the group who could only predict, thus suggesting that control is more than just prediction.

The literature on predictability was reviewed by Miller and Grant (1979) who concluded that there are conditions under which predictable aversive events are less stressful than unpredictable ones. Reviewing studies in which predictability was held constant, Miller (1979) concluded that there were still significant stress-reducing effects as a consequence of exercising control.

2.1.3.6 Control that is difficult to exercise

In many experiments control is easy to exercise, e.g. pushing a button, pulling a lever or tapping a key. Some studies have manipulated the ease with which control can be exercised. Houston (1972) found that subjects who could control shocks by performing well on a difficult verbal task reported less negative affect but showed higher heart rates than subjects who had no control. Manuck et al (1978) similarly found that subjects who had to perform well on a difficult task to avoid aversive auditory stimulation showed higher systolic blood pressure than subjects who could avoid the stimulation on an easy task and subjects who had no control. Solomon et al (1980) found that exercising control was effective for decreasing subjects' anxiety only when low effort was required.

Taken together these studies demonstrate that the relationship between personal control and stress reduction is more complex than was thought by earlier researchers. When control becomes very difficult to exercise, the

arousal generated by exercising the control may be greater than arousal generated when a person has no control over aversive events. However, high arousal generated by exercising difficult control may be attenuated over time with more experience and confidence in control procedures (Solomon et al, 1980).

2.1.3.7. Theories of control

The mechanisms by which control reduces stress seem to be relatively unexplored (Janis and Rodin, 1979) and detailed discussion is beyond the scope of this thesis. There are broadly three categories of theories and these have been reviewed by Miller (1979; 1980).

The first group are regarded by Miller (1979) as circular theories. They either restate the proposition that control reduces stress in different words (e.g. Sells, 1970; Mandler and Watson, 1966) or they fail to specify the mechanism by which control reduces stress (e.g. Averill, 1973; Glass and Singer, 1972).

The second group of theories reduce control to predictability and were reviewed by Miller and Grant (1978). Examples include Seligman's (1968) safety signal view, Weiss' (1971) relevant feedback theory and Berlyne's (1960) information-seeking view. This group seem to conflict with the evidence, previously discussed, that predictability and controllability although closely related, can be distinguished.

The third group of theories regard control as more than predictability and are oriented towards expected outcomes. The internality hypothesis is based on work by Church (1964) and states that having control reduces aversive outcomes by enabling individuals to present stimuli to themselves to suit fluctuations in their moods. Subjects match their internal states with external ones. The minimax hypothesis (Miller, 1979, 1980) postulates that control provides individuals with a guaranteed upper limit on how bad the situation can become. Miller (1979) elaborated:

"A person who has control over an aversive event insures having a lower maximum danger than a person without control. This is because a person with control attributes the cause of relief to a stable internal source - his own response - whereas a person without control attributes relief to a less stable more external source".

Reviewing the evidence on mechanisms of control Miller (1980) concluded that both the internality and minimax hypotheses are adequate to explain the stress-reducing effects of actual control equated for predictability and the effects of potential control. However only minimax specifies conditions under which individuals will choose to relinquish control.

2.1.3.8 Relinquishment of control

It has been noted in experiments that there are usually a few subjects who prefer to opt for uncontrollable aversive events when offered a choice (Averill et al, 1977). Nevertheless there is little in the literature about the circumstances in which people prefer to yield control to others, or the individual difference variables which determine desire for control.

The minimax hypothesis (Miller, 1979, 1980) is the only theory of control which predicts when individuals will prefer to relinquish control. Minimax predicts that people should choose to give up control when they believe that some factor other than their own responding provides a stable guaranteed upper limit of danger (Miller, 1980). People with chronically low self-efficacy (Bandura, 1977) will doubt their ability to execute effective responses in many circumstances and are therefore likely to relinquish control much of the time. Irrespective of self-efficacy, there are circumstances, such as during complex medical or nursing procedures, in which people acknowledge their lack of expertise and prefer to hand over responsibility to an expert.

2.1.4 Psychological concepts relevant to control, and relationships among them.

In recent years a number of concepts have developed in psychology, which are closely linked with the notion of personal control. These can broadly be described as personality variables, which may determine or influence the exercise of personal control. In this section, these personality characteristics, which individuals possess in varying degrees, are briefly discussed. Little is known about the relationships and overlap among these conceptually separate variables. The very limited evidence about relationships among them is also outlined in this section.

2.1.4.1 Locus of control

Locus of control refers to a construct that originated from Social Learning Theory (Rotter et al, 1972). It is a generalised expectancy variable which distributes people according to the degree to which they accept personal responsibility for what happens to them. Rotter (1966) defined locus of control as:

"the degree to which the individual perceives that the reward follows from, or is contingent upon his own behaviour or attributes (internal control) versus the degree to which he feels the reward is controlled by forces outside of himself and may occur independently of his own actions (external control)".

According to Lefcourt (1980) the construct validity of locus of

control as a personality variable has been demonstrated in many studies. There are demonstrable antecedents in the early social background. Internality is generally associated with early access to opportunity (Lefcourt, 1976). Families characterised by nurturance seem to facilitate internal beliefs and a history of consistent parental reinforcement is related to internality. External locus of control is found more frequently among members of lower social classes and ethnic minorities (Phares, 1976).

Phares (1976) pointed out that locus of control can also be a situation-specific expectancy that is aroused by situational cues. The more novel or ambiguous the event, the more likely it is that general expectancy will operate, but if situational cues are strong enough most people will behave similarly regardless of generalised beliefs. Watson and Bauml (1967) hypothesised that lack of congruence between general and situational beliefs causes anxiety which interferes with task performance.

Since Rotter (1966) developed the first well validated locus of control scale, the construct has been found to have high predictive validity for a variety of social behaviours, learned performances and achievement related activities. There is evidence that internals make greater effort to achieve mastery over their environment. This is demonstrated by greater academic achievement (Coleman et al, 1966); more effort to obtain control-relevant information (Seeman, 1963); more attentiveness and more time and effort expended on tasks (Gregory, 1978); more active problem-solving behaviour (Pittman and Pittman, 1979); and more efficient information processing strategies on a memory task (Bartell et al, 1972). Other studies reviewed by Phares (1976) have shown that internals exhibit more self control, are more independent and rely on their own judgement. Attitude change studies show that internals are less susceptible to control and influence from others.

However Lowery (1981) noted that locus of control has failed in many investigations to be predictive of the dependent variable being studied, so clearly there are limitations to the predictive power of the construct. Lowery (1981) argued that an attribution theory approach may be more appropriate to understanding causability, given the many limitations of the locus of control concept.

Locus of control and health-related behaviour

Several health locus of control scales have been developed e.g. Lau and Ware (1981) and Wallston et al (1978).

There is a substantial literature showing that locus of control is a

predictor of various health related behaviours. This was extensively reviewed by Strickland (1978). Most of the evidence suggests that internality is an advantage when considering reaction to illness and treatment. Studies have found that internals seek more health specific knowledge and take more precautionary health measures (Lowery and Du Cette, 1976; Ireland, 1973). Internals value health more highly and collect more information (Wallston et al, 1976) and comply with medical regimens more (Lewis et al, 1978). In surgery internals suffer from less anxiety (Lowery et al, 1975) and influence their care environment by asking for more analgesics (Johnson et al, 1971). In terms of more specific health-related behaviours, internals show more ability to lose weight (Balch and Ross, 1975) and to stop smoking (Kaplan and Cowels, 1978) and to use contraceptives effectively (Macdonald, 1970). Internals are more likely to have preventive inoculations (Dabbs and Kirscht, 1971) and to have regular dental checks (Williams, 1972).

In view of the importance of perceived personal control as a means of coping with stressful events, it is likely that locus of control will modify the relationship between stressors and moods. Johnson and Sarason (1978) found that the relationship between negative life changes and measures of depression and anxiety were more prominent in external subjects. Similarly Kobasa (1979) found that executives who exhibited a high stress-high illness association had a more external locus of control than those in the high stress-low illness group. Lefcourt et al (1981) found that negative life events during the high school years had a lingering negative effect on the current mood state of the more external university students rather than the internals.

2.1.4.2 Reactance theory

The theory of reactance developed by Brehm (1966) assumes that people have the subjective experience of freedom and personal control. When a specific freedom is threatened or eliminated, the individual is motivationally aroused to re-establish control. This arousal is termed reactance. There is considerable empirical support for the theory (Worchel and Andreoli, 1974; Mazis, 1975; Heilman, 1976).

The magnitude of reactance aroused is believed to be a function of the importance of the freedom, the proportion of freedoms eliminated and the magnitude of pressure to comply. When people experience reactance they tend to have an increased desire for the threatened behaviour, engage in the threatened behaviour and any other behaviour which implies they could engage in the threatened behaviour (Brehm, 1966). Wickland (1974) also found increased aggression towards the source of the threat to freedom.

Much "uncooperative behaviour" by patients, such as treatment non-compliance, could be interpreted as an active coping strategy to restore a lost sense of control, that is reactance.

2.1.4.3 "Just World" hypothesis

The "just world" hypothesis proposes that people are inclined to believe in a just world - a place where people get what they deserve and deserve what they get (Lerner, 1965; Lerner and Miller, 1978). The hypothesis is based on the assumption that people are motivated to maintain control over their environment. Evidence of an unjust world threatens the individual's sense of control over potential outcomes and therefore people are motivated to distort reality to maintain their sense of existing in a just world. The hypothesis has received experimental support (Jones and Aronson, 1973).

It follows from the hypothesis that the victims of illness and accidents will tend to be derogated and blamed. Walster (1966) argued that assigning blame to the victim reassures others that they will be able to avoid similar misfortunes. If causality were assigned to an unpredictable set of circumstances, people would have to concede that such an event could happen to them. A study of paralysed accident victims similarly found that self-blame was a powerful predictor of good coping (Bulman and Worman, 1977).

2.1.4.4 Self-efficacy

Self-efficacy theory developed by Bandura (1977) is concerned with judgments of personal competence and mastery, judgments of how well people can organise and execute a course of action required to deal with prospective events.

Self-efficacy influences choice of activities, in that people tend to avoid tasks they believe exceed their coping abilities (Bandura, 1977). The stronger the perceived self-efficacy, the more vigorous and persistent their efforts will be (Brown and Inouye, 1978; Schunk, 1979). People who judge themselves ineffectual in coping with environmental demands tend to generate high emotional arousal and distress. Such concerns then undermine effective use of their competencies (Bandura and Schunk, 1981). Successes raise mastery expectations, which once established tend to generalise to other situations. Similarly, repeated failures tend to lower self-efficacy (Bandura et al, 1975).

Strongly perceived self-efficacy is based upon the gradual acquisition of complex social, cognitive, linguistic and physical skills (Ryckman et al, 1982). Expectations of personal efficacy are derived from four sources of information: performance accomplishments, vicarious experiences, verbal persuasion and physiological states (Bandura, 1977).

2.1.4.5 Helplessness

Early Formulations

Psychologists have long been aware that a sense of helplessness had an adverse effect on behaviour. Richter (1959) observed unanticipated deaths among rats in swimming experiments. When placed in situations where escape was impossible, the rats ceased all efforts to survive. Richter (1959) concluded that induced hopelessness was the crucial variable and he also cited examples of unexplained death in humans, such as voodoo and hexes, which seemed to be due to similar processes.

Bettelheim (1943) analysed the "Muselmanner", the walking corpses of the concentration camps, who came to feel that their environment was one over which they could exercise no influence. They blocked out all conscious awareness of external stimuli and death swiftly followed. Bettelheim (1943) considered that survival:

"depended on one's ability to arrange to preserve some areas of independent action, to keep control of some important aspects of one's life".

Elkins (1963) described how African slaves in the USA were reduced to childlike dependency and irresponsibility by their circumstances. The stereotype of the "docile Sambo" became internalised by the slaves, entailing them being dependent for guidance even for the basic necessities of life. Similarly in concentration camps, according to Elkins (1963), the Nazi guards became father-symbols as the prisoners became "reduced to complete and childish dependency upon their masters". The factor that produced such infantile qualities in both slaves and prisoners was that total control lay outside themselves.

Seligman's learned helplessness model

The term "learned helplessness" was first used by Overmier and Seligman (1967) to describe the debilitated escape-avoidance responding shown by dogs exposed to uncontrollable shocks in the laboratory. The debilitating consequences of experience with uncontrollable events has been widely demonstrated in animals and is reviewed by Maier and Seligman (1976).

More recently investigators have documented the existence of learned helplessness in humans. Seligman (1975) considered the development of learned helplessness in humans could be influenced by non-contingent reinforcement of children; lack of infant control over mother's behaviour; maternal deprivation; rearing in impersonal institutions, and factors associated with poverty and race.

Seligman (1975) maintained that experience with uncontrollable events produced three related deficits: a motivational or performance deficit;

a cognitive deficit consisting of retarded contingency learning; and depressed affect. These were explained as the result of a learned expectation that outcomes were independent of any response a person could make.

Learned helplessness and health-related behaviour

Learned helplessness has been found to be relevant in a variety of health-related spheres. For example, it has been shown to be associated with physical and psychological deterioration in old age (Schulz, 1980) with the coronary-prone personality (Hiniker, 1978; Glass and Carver, 1980), with stomach ulcers (Seligman, 1975) and with sensitivity to illness symptoms and the likelihood of consulting a physician (Baum et al, 1979).

Seligman (1975) used learned helplessness as a model of depression and links between depression and helplessness have been found (Beck, 1976; Rizley, 1978). However, the relationship is complex and later reformulation of helplessness theory was needed to allow incorporation of some of the known cognitive determinants of depression (Abramson et al, 1980).

Seligman (1975) also argued that some deaths could be attributed to learned helplessness e.g. institutionalised helplessness in old people's homes, mental hospitals, orphanages, cancer wards etc; loss of status and self-esteem; acute grief or bereavement; belief in voodoo or magic; concentration camps; and infants separated from their mothers. The individual loses control over important matters and reacts with depression, passivity, submission and eventually death. Vagal inhibition, parasympathetic hyperactivity and the diving reflex are possible physical causes (Wolf, 1967).

Recent reformulations of helplessness

Reviews of helplessness in humans (Miller and Norman, 1979; Buchwald et al, 1978) have criticised Seligman's (1975) original formulation of learned helplessness. Inadequacies included failure to deal with individual differences, the generality of helplessness across situations and chronicity over time (Abramson et al, 1981).

In response to criticisms various new theoretical positions have been elaborated, which incorporate cognitive elements. Of these the attributional approach proposed by Abramson et al (1978) has generated the most discussion. In summary, the reformulated hypothesis states that:

"when people find themselves helpless they implicitly or explicitly ask why they are helpless. The causal attributions they make influence the generality and chronicity of the helplessness deficits as well as later self-esteem".

The new analysis utilizes three attributional dimensions. The dimension of internality-externality predicts whether helplessness is universal or personal. The dimension of globality-specificity predicts the generality of helplessness over situations. The dimension of stability-instability predicts the chronicity of helplessness over time (Abramson et al, 1980).

The attributional approach is acknowledged as a major step forward (Zuroff, 1980) and Abramson et al (1980) claimed some experimental support.

2.1.4.6 Relationship between reactance and locus of control

Ransford's (1968) view implied that people with external locus of control should have a chronically low level of reactance. However, Cherulnik and Citrin (1974) predicted an interaction between mode of elimination of freedom and locus of control. Brehm (1966) had identified two basic modes of elimination of freedom, that which is personally aimed at an individual, and that which is impersonal and could have happened to anyone. As predicted, Cherulnik and Citrin (1974) found that internals showed greater reactance following personal elimination of freedom and externals showed greater reactance following impersonal elimination of freedom. Jones (1970) found a similar interaction.

2.1.4.7 The relationship between self-efficacy and locus of control

According to Bandura (1977) locus of control is often treated in the literature as analogous to efficacy, although locus of control is primarily concerned with beliefs about action-outcome contingencies, rather than personal efficacy. The two can be distinguished, as convictions that outcomes are determined by one's own actions (internal locus of control) can serve to increase or reduce expectations of personal efficacy.

2.1.4.8 Relationship between self-efficacy and learned helplessness

Bandura (1977) claimed that the two concepts are distinct. People may give up trying because they lack a sense of efficacy (low self-efficacy) or they may be confident of their capabilities, but give up because of being consistently punished or an unresponsive environment (learned helplessness). Thus efficacy-based futility and outcome-based futility are distinct types of expectancy with different antecedents and different remedial implications.

2.1.4.9 Relationship between reactance and helplessness

Learned helplessness and reactance theories seem to make opposing predictions. Reactance theory predicts that people will be motivated by loss of control to renew attempts at mastery, whereas learned helplessness

theory predicts that active problem-solving will be impaired after exposure to uncontrollable outcomes. The former predicts hostility, while the latter predicts passivity towards agents restricting freedom.

Wortman and Brehm (1975) proposed an integrative model in which expectations of control, learning that one has no control, and the importance of the outcomes to be controlled, combine to determine responses. Expectations of control and small amounts of evidence that one has no control produce reactance and consequent renewed efforts to exert control. More convincing evidence of lack of personal control produces helplessness and consequent impaired learning and performance. Both reactance and helplessness effects are directly proportional to the importance of the outcome over which control is lost. Studies such as Pittman and Pittman (1979) and Baum et al (1978) have provided support for this model.

2.1.4.10 Relationship between locus of control and helplessness

In general people who hold generalised expectancies of external control appear to behave in ways that are congruent with descriptions of helplessness (Lefcourt, 1980; Hiroto, 1974). Cohen et al (1976) produced evidence that externals generalise more widely following experiences with uncontrollable outcomes than do internals.

However, according to the reformulated attributional analysis of helplessness (Abramson et al, 1978 and 1980) helplessness and external locus of control are orthogonal. Individuals can make either internal or external attributions for their helplessness according to whether they see themselves as personally helpless or universally helpless.

2.1.4.11 Relationship between locus of control and the "just-world" hypothesis

A positive correlation has been found between belief in a just world and internal locus of control. Phares and Wilson (1972) found that internals were more likely to believe that victims caused their own suffering than were externals.

2.2 SOCIOLOGICAL CONCEPTS

Introduction

In this section sociological literature, relevant to patient and family participation in care is reviewed. The traditional patient role is examined, including the notion of "good" and "bad" patients. Factors which may influence illness behaviour such as age, sex, social class and culture are briefly considered. Patient satisfaction studies are reviewed, both because they are a form of patient participation in evaluating care, and to identify the views of patients concerning aspects of care relevant to participation. The traditional patient-health professional relationship is considered, as this forms the base from which patient participation in care develops. The final section looks at the literature on the role of the family in health care and family responses to illness. The nurse-family relationship in hospital care is discussed as it is central to family participation in care.

The term role as used in sociological literature is borrowed from theatrical usage and refers to the behaviour which is attached to certain positions (Kahn et al, 1964). For every recognised position there is a widely shared expectation of what should be the behaviour of persons who occupy that position.

2.2.1 The traditional role of the patient

Parson's (1951) classic exposition of the sick role in Western society involves the following components: the ill person is exempt from the responsibility to perform normal social roles; this is legitimised by the relatives and the doctor; the sick person is obliged to seek competent medical help and cooperate in getting well; and the incapacity must be reversed by a therapeutic process. The most important feature of the patient role is its passivity. As Parsons (1964) pointed out the whole organisation of the hospital converges on the patient to prevent him or her making decisions. Factors such as social class and tradition also ensure that the patient surrenders decision-making. Parsons (1964) considered that passivity served to mitigate anxiety by abdicating responsibility in favour of dependence on a source of authority. The role is learned in childhood through contact with illness. By conforming to the expected role, the sick person can be fitted into the system of health care delivery and becomes a "good" patient.

Parson's formulation can be criticised for many reasons. Stacey and Homans (1978) considered that the sick role was developed purely from the perspective and ideology of the medical profession; it does not allow for social class differences; and it does not allow for developmental changes

in society over time. Parson's work can also be criticised for not allowing for changes or conflict within the person occupying the sick role, which Armitage (1979) has shown to be necessary. Illness is seen as a form of deviance and alienation, because the presented passivity and dependency are counter to the activism of Western society. Kasselbaum and Bauman (1965) argued that the sick role was relevant only to acute illness and had little applicability in chronic illness. Finally, the work is theoretical and has little empirical support.

2.2.1.1 "Good" and "bad" patients

Numerous studies have found that with few exceptions health care professionals, particularly nurses, continue to see the "good" patient as a passive recipient of care, who is compliant, co-operative, uncomplaining, undemanding and appreciative (Coser, 1956; Skipper, 1965; Larson, 1975; Hover, 1975; Taylor, 1979; and Armitage, 1980).

In a British study, Stockwell (1972) found that patients who failed to conform to this pattern were unpopular with nurses. This has been confirmed in Australia (Roberts, 1984) and Canada (Rosenthal, 1980). Anderson (1973) found that student nurses had the highest percentage response for preference for passive patients. The few nurses who preferred independent patients were mostly of sister grade.

Studies have shown that acceptance by staff is a major concern of patients (Tagliacozzo and Mauksch, 1972) and that a large percentage of patients recognise that nurses expect them to be undemanding and passive (Anderson, 1973; Tagliacozzo and Mauksch, 1972; and Taylor, 1979). Working class and younger patients particularly see the good patient as passive (Anderson, 1973), whereas educated professional patients tend not to adopt compliant behaviour in hospital (Lorber, 1975).

Taylor (1979) used the concept of learned helplessness in her analysis of patients' experiences in hospital, which she assumed were characterised by depersonalisation, loss of control and lack of information. This was confirmed by Raps et al (1982) who considered that learned helplessness was generated in hospital. Taylor (1979) described possible adverse physiological effects of prolonged passivity in terms of reduction to the adaptive reserves that should facilitate recovery. Learned helplessness has been associated with nor-adrenaline depletion (Seligman, 1975) and deteriorating health and death (Schmale, 1972).

"Bad" patients who attempt to gain control, make frequent requests and demand attention are exhibiting reactance, according to Taylor (1979), which may facilitate effective decision-making and readjustment to life after discharge. In an early study autonomous patients were described as less

well adapted to hospital, but better at resuming social roles after discharge (Coser, 1956).

2.2.1.2 Individual variations in illness behaviour

Patients' attitudes to health professionals differ, as do their perceptions of their own and their family's role as recipients of health care. Patient behaviour may vary according to culture, age, sex, social class, education and numerous personality variables. Most studies have tended to regard patients as a single homogeneous group and little attention has been given to individual variability.

Cross cultural variations in illness behaviour and enactment of the sick role have their origins in locally acceptable norms of behaviour. For the patient to embark on what is deemed the normal procedure for alleviating an illness will itself reduce anxiety. This was illustrated by Zborowski's (1952) classic study of the varying responses to pain of Americans from different cultural backgrounds.

The illness behaviour of Asian families in Britain was studied by Henley (1979) who identified discernable patterns of behaviour and belief. For example, sick Asian people are normally expected to express pain, anxiety and grief openly and to retire passively to bed while sick. The extended family is expected to care for the sick person, to share in the suffering and to perform the sick person's duties until health is restored. In view of the considerable variations in sick role behaviour, it is not surprising that Stockwell (1972) found that foreign patients tended to be unpopular with nurses in hospital.

Nurses of different cultural backgrounds also vary in their conceptions of appropriate patient behaviour. Bhanumathi (1977) found that Indian nurses expected patients to receive their treatment passively, unquestioningly and to take no part in getting well. The Indian nurses encouraged regressiveness and saw "careless and wrong living habits" as predominant causes of illness.

Social class has been shown to be a crucial determinant of illness behaviour and attitudes to health care in many studies. Social class gradients have been found in the availability and utilisation of general medical care (Tudor Hart, 1971); preventive services (Waddington, 1977); dental services (Bulman et al, 1968); family planning and ante-natal services (Milio, 1975). Middle class patients tend to have more knowledge about their bodies ^{evidence cited by} (Mangen, 1982), are more likely to acquire information in hospital and general practice consultations by asking questions and discussing problems (Cartwright, 1964; Cartwright and O'Brien, 1976) and are thus better able to make constructive use of health services.

Age variations in illness behaviour have commonly been observed. For example older people have a restricted notion of what constitutes justification for seeking medical help as they attribute much disability to the inevitable ageing process (Maclean, 1974). In a sample of patients recovering from cardiac surgery, Brown et al (1978) found that age was the most powerful predictor of analgesic and tranquillizer consumption, with older patients receiving fewer. Wilson-Barnett and Carrigy (1978) found that women under 40 were more emotionally reactive to a stay in hospital than older women.

Sex differences in illness behaviour have been observed. In a review Nathanson (1975) found that surveys in Britain and America consistently revealed higher rates for women than for men on almost all indices of morbidity and utilisation of health services. This was more recently repeated by Hillier (1982). There are no biological explanations for this difference. It may be considered more acceptable for women to express pain and dependency and to seek help from others (Phillips and Segal, 1969) and sick role behaviour may be more compatible with women's other role responsibilities than with men's.

A study of Greek patients by Kymissis (1975) found that male status needs were threatened by hospitalization and the resultant role discontinuity could hinder their progress unless they regained some status by being allowed choices during treatment. Hospitalized Greek women experienced less discontinuity since their normal social status was more subordinate. It seems likely that this finding could apply to other nationalities.

2.2.2 Patient satisfaction studies

Studies of consumer opinion, to the extent that they are used in policy formulation, can be interpreted as an indirect form of patient participation, the development of which is discussed in Chapter 3. It has also been realised that satisfaction with care is an important determinant of whether a person seeks medical advice, complies with treatment and maintains a continuing relationship with a practitioner (Larsen and Rootman, 1976). However, many professionals still do not believe that the consumer is the best judge of services offered. Marram (1973) found that American staff nurses rated patients and their relatives as slightly to moderately influential in determining the nurses' rewards and penalties, but as less important than all other health professionals.

Studies of patient satisfaction with various aspects of hospital and community health care have been reported by many researchers. Findings concerned with psychological aspects of care appear to be remarkably

consistent. In a review article Locker and Dunt (1978) commented that on the whole studies of both general practice and hospital care indicate that the majority of patients will state that they are very satisfied with their care when asked to give an overall assessment. The same patients, however, express lower levels of satisfaction when asked about specific aspects of care. Elderly patients consistently report higher levels of satisfaction than younger age groups (Raphael, 1967; Royal Commission on the NHS, 1978). The relationship between satisfaction and social class is not consistent across studies, but there is some indication that lower social class is associated with greater satisfaction (Carstairs, 1970; Raphael, 1967).

The communication of information about illness and treatment appears to be the most frequent source of dissatisfaction in British Studies (McGhee, 1961; Cartwright, 1964; Raphael, 1967, 1977 and 1977; Ley, 1976; French et al, 1977; Reynolds, 1978; Royal Commission on the NHS, 1978). This confirms studies in the USA which found that satisfaction with care is a product of the amount of information received by the patient (Locker and Dunt, 1978). Dissatisfaction with other aspects of communication, such as impersonal and patronising attitudes of staff was also expressed (Ley, 1976; Steele and Morton, 1978; Royal Commission on the NHS, 1978). Generally, patients seemed more satisfied with their relationships with nurses than with doctors, and said they were given more information by nurses than by doctors (Wriglesworth and ^{Trevor}Williams, 1975; Royal Commission on the NHS, 1978).

Many of patients' criticisms of physical facilities such as lack of privacy at the bedside, poor sanitary facilities, noise and hot stuffy atmosphere have been interpreted as concern with "lack of control, by patients, over what happens to them" (Kenny and Canter, 1979).

2.2.3 Traditional patient-health professional relationships

The patient-professional relationship is classically premised on the doctor having the skills and knowledge needed by the patient, who must therefore accede to professional judgement. Because the patient is outside his or her area of expertise, the doctor has considerable power and authority (Parsons, 1951; Greenwood, 1957).

Kalisch (1975) described the doctor's "Aescupalian authority", which stems from "the physician's expertise, the patient's faith in him (sic) and the belief that he has almost mystical powers". According to Kalisch, this "awesome authority" rules out patient participation in decision-making and is essential to give patients the confidence to undergo treatment.

The relationship between patient and professional can be viewed as one of potential conflict (Friedson, 1970; Bloor and Horobin, 1975).

This is rooted in the contradictory expectations doctors have of patients. Patients are expected to be their own diagnosticians to present their symptoms initially, but must then passively defer to superior judgement.

Three models of the doctor-patient relationship were described by Szasz and Hollender (1956) as follows:

- Doctor active and patient passive. This describes emergencies when the patient is helpless.
- Doctor guides and patient cooperates. This describes most acute disorders, where the patient is capable of exercising some judgement and can follow medical orders. This accords with Parson's (1951) view of the sick role.
- Mutual participation. This model is most common in the management of chronic illness, in which care is carried out by the patient and family, with occasional medical consultations.

Friedson (1961) argued that the formulation was incomplete and logically two further models were required: patient guides and doctor cooperates; and patient active and doctor passive.

A study of occupational prestige (Shortell, 1974) found that fields of medicine characterised by mutual participation were repeatedly accorded low prestige ratings. Specialties assigned high prestige were those in which the doctor's remoteness, authority and dominance were more assured.

An example of how patient passivity was sustained in an extended care unit was provided by Mikulic (1971). She found that nurses more consistently provided positive reinforcement to patients for dependent than for independent behaviours, thus increasing dependent behaviours at the expense of independence.

The traditional patient-health professional relationship is undergoing revision, as a result of social changes in health care, which are reviewed in Chapter Three. Reeder (1972) considered that these changes include: reorientation of medicine from treatment to prevention; provision of services within bureaucratic structures; and the growth of consumerism as a social trend. The influence of consumerism on the patient-professional relationship is discussed in Chapter Three.

2.2.4 Role of the family

The importance of the family in illness and health care should not be underestimated, as it constitutes the social context within which illness and health care occur (Litman, 1974).

Anthropological studies suggest that the amount of care provided by

families in illness varies from country to country and between ethnic groups within one country. In the West there is a far greater acceptance of professional rather than family care in sickness than there is in developing countries (Eldar and Eldar, 1983).

Since the 1960's, social policy concerning care of the elderly, the mentally ill, and the mentally and physically handicapped has sought to extend the family's role by having these patients cared for in the community rather than institutions (Locker, 1982). Similarly, shorter hospital stays for childbirth, surgery and acute mental illness increase the responsibility on families as patients return home sooner (Locker, 1982). Paradoxically, having admitted patients to hospital, the family who at all other times are expected to be the care givers are excluded (Castledine, 1978).

Despite increasing interest in the role of the family in health care, empirical research has remained relatively limited (Litman and Venters, 1979).

Rosenthal et al (1980) identified from observations three roles into which the family may be placed by nurses. The most favoured role is that of visitor, as it is least threat to control and requires conformity to clearly defined expectations. The worker role is given to relatives who spend extensive periods at the hospital, are slipping out of the visitor role, and are interested in being involved in the patient's care. This brings the relative into the authority system of the ward, placed in a subordinate position to the nurse. The worker role breaks down when the relative oversteps the bounds of the role and the relative is then placed in the patient role. This endows the relative with the status of a problem patient who must be managed.

2.2.4.1 Family responses to illness

The dynamics of normal family relationships are seriously affected when one member contracts an illness. The roles of remaining family members change, particularly when the patient is taken to hospital (Lipowski, 1975) and the family may enter a state of disequilibrium.

Several studies have found high levels of stress and anxiety in the families of hospital patients. Lefebvre (1978) found that the diagnosis and treatment of cancer resulted in stress and adjustment for the spouse. Silva (1977) found high levels of anxiety in the spouses of patients scheduled for major surgery, yet they received minimal nursing attention. A pre-operative teaching programme shown to spouses resulted in more positive attitudes towards the hospitalisation and less reported anxiety.

Stember (1977) found that stress was reduced by family experience with hospitals during the previous five years. This experience could have been as a patient, visitor, employee or volunteer.

2.2.5 The nurse-family relationship in hospital care

The nurse-family relationship is difficult to define (Rosenthal et al, 1980). The position of the family is vague and subject to shifting definitions, and as outsiders, the family are less subject to control than patients and therefore represent a potential threat to nurses. Kodadek (1979) noted that the family's increasing sophistication may threaten and challenge the professional.

There is evidence that the presence of the patient's family is stressful to nurses. Research by Cassem and Hackett (1971) showed that the care of family members was one of the most distressing problems for the coronary care unit nurse. Similarly, in Yoder and Jones' (1982) study, when nurses were asked to identify stressful aspects of working in casualty, 24% named stresses associated with patients' families. Nearly half of the nurses saw families as at least potentially troublesome.

Several studies have found very limited and superficial communication between nurses and patients' relatives (McIntosh, 1977; Krant and Johnson, 1978; Gould and Toghill, 1981; and Stedeford, 1981). Bond (1982) studied the communication between the next-of-kin of cancer patients and the ward staff. Only 25% of all relatives had spoken to a nurse, and all but one of those relatives had initiated the contact. Relatives were not given assistance with their own problems. Bond (1982) considered that nurses avoided establishing relationships with relatives because of lack of time, because they regarded information giving as the province of doctors, and because of fear of overstepping institutionally defined boundaries.

Similarly, Rosenthal et al (1980) found that nurses wanted a compliant and cooperative family. Open visiting, which was policy in the hospital studied, made it difficult for nurses to maintain social distance, prevent extensive questioning and interference, and thus maintain control. Rosenthal et al (1980) observed that although family participation in care was overtly viewed favourably by nurses due to their training and the hospital policy, in practice it was an area of conflict and confusion.

PART 1. CHAPTER 3.

PATIENT AND FAMILY PARTICIPATION IN HEALTH CARE : A REVIEW

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PART 1. CHAPTER 3.

PATIENT AND FAMILY PARTICIPATION IN HEALTH CARE : A REVIEW

3.1 INTRODUCTION

Chapter Two contributed to the theoretical background of the study by identifying areas of relevant literature from the foundation disciplines of psychology and sociology. In Chapter Three literature more directly related to patient and family participation in care is reviewed.

After briefly considering consumerism as a general social trend, health care consumerism is analysed, including its nature, reasons for its recent development, and individual differences in preference for participation. The next major section examines specific examples of patient participation both in community and hospital care; including community health councils, patient participation groups in general practice and self-help groups as examples of patient participation in community health care. Studies of elderly, medical, psychiatric and chronically sick patients exemplify hospital care. Studies on providing information to patients and patient education are next considered, as these are conceptually similar to patient participation. The relatively short section on family participation in care reflects the limited material available. Finally, the attitudes of health professionals and patients towards patient participation in care are considered.

In this review it is necessary to cover a wide area and draw on much peripheral literature, because there is little that is very closely related to the study itself. There have been few well-controlled empirical studies of patient and family participation in care, so it is necessary also to examine prescriptive and anecdotal accounts, uncontrolled descriptive studies and theoretical discussions. As far as possible the nature of the material being reviewed is made explicit and its limitations and problems are discussed where appropriate.

3.1.1 Consumer participation as a general social trend

The idea of consumer participation emerged in the late 1960's and 1970's in several countries, including Britain and the United States of America (USA). There has been a dramatic increase in the idea that ordinary citizens might have a part to play in aspects of social organisation that affect their lives. Participation may be direct or indirect and may take place in the delivery of services or in planning and decision-making about services. Consumer participation in social policy has been comprehensively reviewed by Richardson (1983).

This general social trend has been influential in many areas. Workers

and trade unions are increasingly represented on boards of directors and the importance of worker autonomy has been recognised (Srivaskva et al, 1975). Participative management has been introduced in the health services (Herrod, 1978; Wheeler, 1978). The British Army has recognised the importance of democratic leadership and increased responsibility for junior ranks has been recommended (Brooking, 1983). In overseas development, the importance of helping rural communities to take responsibility for their own development is increasingly recognised. University senates now have student representatives and schools' boards of governors have parent representatives. The Consumers' Association represents the interests of the public in relation to the retail trade.

Many other examples are available but these few show the influence of consumer participation in contemporary society, which has been described by Weiss (1979) as "the age of the consumer".

3.2 HEALTH CARE CONSUMERISM

3.2.1 Democratic principles and health care

In a democratic society it is interesting to consider the extent to which a major social institution such as health care, is organised according to democratic principles. The form of democracy that exists in Western societies is largely derived from the ideas of Locke (1690), who propounded the doctrine of "natural rights", which are immune from government interference. This is the direct ancestor of the Bill of Rights in the American Constitution. At the core of the concept of democracy are notions of public accountability, public expression of opinion, and procedures for the governing to consult the governed (Hirst and Peters, 1970). The notions of self government or participatory government and equality of rights are also central.

Similarly, the notion of personal autonomy as an essential moral principle appears in the United States Declaration of Independence, in the French Declaration of the Rights of Man and in the United Nations Declaration of Human Rights. The general commitment to democracy and personal autonomy justifies taking it seriously in health care.

Much medical practice is based on the principle of paternalism, which involves depriving people of personal choice and control, out of concern for what the paternalist believes to be their best interests. Paternalism, although benevolent, is incompatible with the basic tenets of liberal democracy which values human autonomy as an essential principle (Bassford, 1982). An illustration of the widespread use of paternalism was the finding that 90% of doctors studied by Oken (1961) tended to withhold from their patients the information that they have cancer.

Codes of medical ethics have tended to outline proper behaviour for doctors but include little on the rights of patients and societies with regard to health care. Hamilton (1982) argued that physicians have traditionally held to codes of ethics that act primarily in their own interests. Nursing ethics appears to be more patient-centred. For example the Royal College of Nursing's Code of Professional Conduct (Campbell, 1979) specified that a fundamental aspect of the nurse's responsibility is the maintenance and restoration of the patient's autonomy and refers to the need to facilitate active participation of patients in their own treatment. Advocacy for patients has been suggested as an important nursing role (Curtin, 1979).

Many writers have described how the increasing influence of medicine over every sphere of life is an insidious and dangerous form of social control (Zola, 1971; McKeown, 1976; Kennedy, 1981). In a complex and comprehensive analysis of health care Illich (1975) argued that the medical establishment deprives individuals and communities of their traditional capacity to deal autonomously with illness, pain and death. He considered that independent self-care becomes increasingly paralysed by the expansion of corporate medical care. Illich (1975) recognised that in several nations the public is ready for a review of its health care system and he argued that the recuperation of personal responsibility for health care should become the central issue. Illich's prediction seems to be accurate as a "consumer revolution" (Benson, 1977) in health care seems to be occurring.

3.2.2 The concept of patients' rights

According to Annas (1975), patients' rights are derived from three sources: legal or constitutional rights; fundamental human rights; and rights that exist because of the unique relationship between patient and health care provider.

There is controversy concerning the need to formulate specific rights for various social roles, such as patients. Holloman (1976) argued that patients' rights are no different from other human rights. However Bandman^{and Bandman} (1977) pointed out that as power is not evenly distributed in society and as rights are meaningless without remedies for their violation, it is necessary to identify the minimum rights to which patients are entitled.

Various documents listing patients' rights have been produced by health care providers and consumers. The American Hospital Association (1972) included rights to privacy, confidentiality, information and informed consent. The Ohio Nurses' Association (American Journal of Nursing, 1975) included the

the right:

"to participate, along with your family, in your individualised nursing care".

The World Health Organisation/United Nations' Children's Fund (WHO/UNICEF) (1978) referred to health being a "fundamental right" and that:

"people have a right and duty to participate individually and collectively in the planning and implementation of their health care".

The British National Consumer Council (1982) adopted as a resolution a conviction of the:

"need for a statement of rights of patients... incorporating all the statutory and common law rights of the individual to medical care".

Next to confidentiality and privacy, the principle of informed consent appears most frequently in bills of patients' rights, and this is a key element of the right to self-determination (Hamilton, 1982). Although many writers agree that bills of rights are likely to have many benefits for patients and health care providers (Quinn and Somers, 1974) they have dubious legal status (McMahon, 1976) and alone are not sufficient to protect patients' rights.

3.2.3 The nature of consumerism in health care

Three approaches to health policy were described by Smart (1979). The authoritarian approach in which health goals are defined by experts is the dominant and traditional approach in Britain. The "laissez-faire" approach exists in the private health care sector where health goals are decided on individual preference and achieved by purchase of goods and services. The democratic or participative approach is the ideal model associated with consumerism in health care. Health goals are decided by collective agreement based on democratic decisions by the people affected. There is joint decision-making by health care workers, patients and relatives, rather than unilateral decision-making by professionals (authoritarian approach) or patients ("laissez-faire" approach). Expertise is diffused and hierarchical authority patterns diminished.

Patient or consumer self-care and participation in health care have been described by many writers (Paine, 1982; Martin, 1978; Levin et al, 1977; Gallichio, 1977; and Thompson, 1972) as a growing movement aimed at increasing lay-peoples' responsibility, decision-making power and range of action with regard to their own health care and the wider health care system. The frequent use of the term consumer, instead of patient or client, itself has different connotations. Reeder (1972) considered that a client delivers himself or herself into the hands of the professional, who is the sole decision-maker, whereas a consumer is a purchaser of

services and is guided by "caveat emptor", i.e. let the buyer beware.

Consumer participation in health care has been conceptualised at different levels. It can be directed at the individual's health, the health of the immediate social group, and at the level of the whole community (Levin et al, 1977). Individual self-care can be further divided into health maintenance and self-care in illness (Williamson and Danahar, 1978). Personal self-care in health includes the regulation of body processes, disease prevention and education about health. Personal self-care in illness may in some instances be an alternative to professional care and include self-diagnosis, self-treatment and self-medication (Barofsky, 1978); or may be an adjunct to professional care and include use of professional resources, interaction with professionals and participation in the care and treatment of the illness. Consumer participation in the wider context of health care has been described by Thompson (1972). It includes psychological aspects such as increasing awareness of ability to exert influence over institutions; developing programmes to meet needs defined by the whole community; and political change to bring ordinary people into the economic and political system. Thus the consumer may be involved in many areas of health policy - planning, organisation, delivery and evaluation (Van den Heuvel, 1980).

Several models of self-care have been proposed. For example, Barofsky (1978) described four alternatives which he termed naturalistic, which assumes humans have a natural capacity for self-care; egoistic, associated with psychodynamic theory; existential, in which self-care and illness are seen as affirmations of self; and ideological. Each of these models enables self-care to be understood within different views of the nature of humans. They have not been tested empirically, but derive support from their underlying philosophy.

3.2.4 Reasons for the development of consumerism in health care

There have been several attempts to explain the recent upsurge of interest in patient participation and self-care. A number of general changes in society are thought to have contributed. These include improved general education resulting in higher expectations (Levin et al, 1977; O'Connor, 1978; Croog and Ver Steeg, 1972); loosening of traditional social values, including decreased power of the Church, less deferential attitudes to authority and increased classlessness, the human rights movements and legislation, such as sexual and racial equality (Gallichio, 1977; O'Connor, 1978); the effects of the mass media (Croog and Ver Steeg, 1972), and consumerism in general as discussed in Section 3.1.1.

Factors related to the health care system are also thought to have

contributed. Reappraisal of practices and attitudes has taken place in several health care professions, including nursing. Green et al (1977) argued that nursing led the impetus to self-care with a shift from the Nightingale model of helping the helpless, to the current themes of self-care associated with the views of Henderson (1960) and Orem (1971). The mass media have contributed to the demystification of health care and have highlighted lay concern about abuses (Levin et al, 1977). There are changing sources of payment for medical care with increasing numbers of people paying at the point of service through insurance (O'Connor, 1978; Croog and Ver Steeg, 1972). The limited availability of professional services has also contributed (Levin et al, 1977).

Thus it can be seen that there is no single reason for the recent development of consumerism in health care. General changes in society and changes associated with medical and nursing care have all contributed. There has been an exchange of ideas between countries, through literature and conferences. An examination of the literature suggests that the USA has been at the forefront of these developments.

3.2.5 Individual differences in preference for participation

Patient participation has its theoretical roots in the psychology of personal control, reviewed in Chapter 2, and there is evidence that participation and self-care may facilitate coping in illness. In a review of research, Janis and Rodin (1979) argued that:

"increases in personal control presumably lead to improvements in coping with stress... in most aspects of health care there can be potential benefits from increasing the patient's opportunities to exercise control".

However, individual differences and situational factors must be taken into account, or increased stress can result (Haan, 1979) as there appear to be other methods of coping with the stress of illness, such as inhibition of action, which may be preferred by some people (Cohen and Lazarus, 1979). The research reviewed in Section 2.1.3.8 showed that some people avoid control, choice and responsibility, at least some of the time.

There are many factors which may influence the extent to which patients will choose to participate in care during illness. Some of these can be identified as including patients' perception of opportunities for participation in the environment; personality characteristics, such as locus of control and self-efficacy; demographic variables, such as age, sex, education and race; and environmental variables, such as the nature of the clinical setting. Most of these variables have not been directly tested in research on patient participation. At best, hypotheses about their probable effects can be inferred from related work.

It appears that the context and meaning of the control response determines its effectiveness in reducing stress. Miller's (1979, 1980) minimax theory of control (see Section 2.1.3.7), for which there is some empirical support, predicts that people will choose to relinquish control when they believe that factors other than their own responding provide a more stable upper limit of danger. This will happen when control is objectively very difficult to exercise, such as during complex nursing procedures; or because of personality characteristics, such as low self-efficacy, external locus of control, or learned helplessness.

A number of studies have examined the relationship between subjects' usual preferences for control and actual control available to them in the health care setting. For example, Cromwell et al (1977) found that heart patients given treatments congruent with their control beliefs showed the best outcomes on several rehabilitation measures. Reviewing the evidence on individual differences, Krantz et al (1980) concluded that subjects fare best when given treatments that are congruent with their usual coping styles and expectations.

3.3 EXAMPLES OF PATIENT PARTICIPATION IN COMMUNITY AND HOSPITAL CARE

Consumerism in health care is manifest in a wide variety of aspects of the health care system, some of which will be briefly mentioned in this introduction and others discussed in more detail in the following sections. . The development and proliferation of community health councils, patient participation groups in general practice and a variety of self-help groups illustrate organised forms of community-based patient participation, which operate at policy making, small group and individual self-care levels. These are discussed later.

Examples of patient participation from specific groups of patients, mainly in hospital care, will be discussed later. These sections describe patient participation as an adjunct to professional care, usually in illness and which operate at the level of individuals participating in their own care and treatment. Types of patients who are considered include the elderly, the mentally ill, patients with medical conditions and with chronic diseases. These examples were included because of the amount of literature available and because of their relevance to the empirical work.

Discussion of all the relevant developments in Britain is beyond the scope of this review, but a few examples can be outlined. Several consumer groups have been recently established. The College of Health was set up by lay people to give patients increased information and power. Its founder chairman, Baron Young of Dartington, also launched the Consumers' Association

(Young, 1983). The Patients' Association represents the interests of disaffected patients. The Association for the Victims of Medical Accidents provides support and legal representation for patients who complain about inadequate or negligent treatment. Indeed, the increasing number of cases and complaints dealt with each year by the Medical Protection Society is evidence of patients' increasing dissatisfaction, assertiveness and willingness to complain.

A massive increase in media interest in all aspects of health care has occurred in recent years and is associated with an increase in public knowledge about health and illness. In an annotated bibliography of books relevant to self-care practices, Levin et al (1977) were able to select from over 350 titles, which they considered was only a fraction of the relevant literature.

3.3.1 Patient participation in community health care

3.3.1.1 Community health councils (CHC's)

CHC's were established under the National Health Service Reorganisation Act 1973 to represent the interests of the public to the health authorities. One of the major objectives of reorganisation was greater opportunity for the public to participate in the affairs of the National Health Service (Department of Health and Social Security (DHSS) 1974). Each health district was to have its own CHC.

Most of the following information was derived from Levitt (1980). CHC's have a variable number of members, nominated by local authorities, voluntary organisations and the regional health authority. Members serve in a voluntary capacity for a four year term. CHC's occupy premises at which the public may call for information and assistance. Meetings are open to the public and may invite public participation. Members work on specific topics in small committees.

CHC's must be consulted by health authorities as a regular part of the planning process. They have the right to send an observer to health authority meetings and are entitled to receive information. CHC's can visit hospitals and other health care premises. Some CHC's also participate in planning teams, joint consultative committees and family practitioner committees by invitation. The DHSS consults CHC's on questions of national policy and sends them copies of all DHSS circulars.

In June 1977 the Association of CHC's for England and Wales was established to act as a national advisory body. Within its scope an information service and a monthly magazine are provided for all CHC's with funding from the DHSS.

The style and scope of the work of each CHC varies widely, depending upon the interests and abilities of its members and staff, and the nature of local health care problems. The members of CHC's are characteristically middle class and middle aged, these being the people with time and inclination for voluntary work. Very often those people who most need the service are least aware of it, or perceive it as bureaucratic and "official".

3.3.1.2 Patient participation in general practice

Apparently high levels of patient satisfaction with general practice cannot be accepted at face value. Pendleton (1982) argued that patients are biased towards positive evaluations for a variety of reasons, but that consistent criticisms of general practitioners (GP's) could be identified from a review of literature. These included apparent or real lack of interest, inaccessibility and inappropriate attitudes. An inability to work effectively with other professionals was also cited. Difficulties at a broader level were identified by Metcalfe (1982) and included the importance of primary care maintaining effective communication with all parts of society, especially the disadvantaged.

The development of patient participation groups.

The first patient participation group was started in 1972 in Oxford and over the next few years more groups started. By 1978 there were 14 groups. There was an expansion in 1981 when 13 new groups started (Paine, 1982). By 1983 there were about 50 groups operating in Britain and they are increasing exponentially (Pritchard, 1983).

The idea of patient participation has been supported by the Royal College of General Practitioners who sponsored a conference and published a collection of papers (Pritchard, 1981). These events were probably the turning points in achieving professional acceptance.

The National Association for Patient Participation in General Practice was formed in 1978 to link groups and encourage further developments. It circulates information, holds regional and national meetings and supports research, evaluation and new initiatives in patient participation (Dakin, 1981).

The Royal College of General Practitioners set up a Patient Liaison Group as recommended by a Working Party (Journal of the Royal College of General Practitioners, January 1983). This consists of College members and patients nominated by the Association of CHC's. Its functions are to nominate and support patient representatives to working parties, committees and the Council, to initiate areas for discussion in Council and to

initiate activities at local level. In the long term, local patient liaison groups will be established. This development has been supported by the Royal College of Nursing (Rcn) (Nursing Standards, January 1983) and it goes some way towards WHO's recommendation (Kaprio, 1979) that patient participation should become a normal part of general practice.

There are wide variations in types of populations served, style of practices and aims, organisation and activities of patient participation groups. Whilst recognising this diversity, Pritchard (1983) identified some common areas of activity. Most groups were concerned with developing health education; linking practice and community networks; providing feedback from patients to doctors to assist in planning and evaluating services; supporting vulnerable patient groups; and being a forum for complaints. In his large survey Paine (1983) found that many groups were also involved in voluntary services, fund raising, special interest and self-help groups, fact finding and providing information to patients, and social activities.

Difficulties with patient participation groups

Several writers (Paine, 1983; Pritchard, 1979; Sand, 1978) have identified the failure of groups to attract sufficient numbers of patients to meetings as a major problem. It is doubtful whether those patients who become involved are representative of all patients in the practice. Many patients are unaware of the existence of the group, others are not interested. Publicity and advertising can be difficult because of economic and ethical constraints.

Wood and Metcalfe (1980) interviewed ten GP's with groups and 15 without groups. They found that GPs without experience of groups considered that groups were formed in response to patient dissatisfaction, that they played a predominantly critical role, led to conflict, loss of professional autonomy and status. In contrast, GPs who had formed groups believed they made an important contribution to their developing role and have been encouraged by their experience.

In an analysis of four patient participation groups, Sand (1978) found that all groups were dependent on the enthusiasm of the doctors and considered it unlikely that any change in the balance of power would occur. Sand considered that groups needed a greater degree of independence from doctors if complaints were to be dealt with effectively.

In a large scale survey, Paine (1983) found dissatisfaction with the degree of involvement of practice staff, other than doctors. The role of practice nurses has hardly been discussed in the literature, although

Dopson (1980) reported that health visitors and other members of the practice staff did take part in the exchange of views.

Some doctors have expressed alarm at the prospect of patient hostility and militancy (Pritchard, 1983). But surveys have shown that in most groups there is an emphasis on participation rather than seeking "patient power" (Graffy, 1980; Sand, 1978).

Evaluating the effectiveness of patient participation groups in general practice.

No major evaluation studies were found. Pritchard (1983) considered that there is first a need to determine appropriate outcome measures. This is difficult as there is little consensus of aims.

Several surveys have concluded that patient participation groups seem to be effective in improving services for patients and developing constructive doctor-patient relationships (Sand, 1978; Graffy, 1980). Sand considered that major achievements were concerned with practical undertakings, where there would be agreement between doctors and patients. However, Dakin (1981), emphasised the central aims of creating more equal relationships and enhancing communication.

Patient participation groups are proliferating in general practice. It is thus important that they should be carefully evaluated. They have the potential to be influential as they exist at the level at which most members of the public interact with the health care system.

3.3.1.3 Self-help groups

According to Demone (1974) self-help groups:

"are the fastest growing component of the human service industry. Nor is this surprising. Man is a social animal who throughout his history has banded together for problem-solving and survival".

The reasons for the rapid proliferation of self-help groups are complex. Robinson and Henry (1977) suggested that there is disillusionment with existing services, such as GP's; a decline of supportive social institutions; an increasingly articulate anti-professionalism; and a contribution from the media.

The Samaritans were an early example of lay help in Britain, but they clearly distinguish between the helper and the helped (Felstein, 1980). The next stage of aid is where individuals actively help themselves using the mutual support of a group with similar problems. Alcoholics Anonymous was an early example of such a group.

Self-help groups provide a "therapeutic culture" (Jones, 1979) in which the members grow stronger through their collective expression of

interest, mutual understanding of "stumbling blocks" and joint desire to reach a goal of improvement. Gamblers Anonymous, Depressives Associated and Weight Watchers are typical examples.

Self-help groups may be started by individuals dissatisfied with orthodox medical and social help. For example, the U and I group was started by a chronic cystitis sufferer for others similarly afflicted. Conversely groups may start by casual meetings of people sharing a common burden. The Scottish Association for the Parents of Mentally Handicapped Children started this way in the 1940's.

Self-help groups have been classified into four types according to their purposes and composition by Levy (1976). The first type contains members who share a common set of circumstances and want to ease the stress involved. Examples include the British Diabetic Association, the Ileostomy Association and the National Eczema Society. The second type consists of individuals who have difficulty with social behaviour. This includes groups for phobics, alcoholics and gamblers. The third type consists of individuals who seek mutual support because of a lifestyle classed as deviant, e.g. Campaign for Homosexual Equality. The fourth type consists of those which aim to promote individual maturity and enrich life. An example is the National Council for One-Parent Families.

Health care professionals sometimes recognise the value of self-help groups. They can ease the transition from the sheltered hospital environment to the more exposed home situation during recovery, e.g. stroke clubs offer help to the patient and family on practical and psycho-social problems. Orem (1971) (see Section 4.3.3) believed that self-help groups are particularly valuable when the nurse is functioning in a supportive-educative mode, in which the main nursing contribution is to teach the patient self-care measures.

The stigma associated with disability may prevent full acceptance in society of the sufferer who may become socially isolated and distressed. Membership of a self-help group helps adjustment, restores self-respect and places the stigmatic elements in a minor context. An example of this is the Little People of America, a self-help group for dwarfs, described by Ablon (1981).

Killilea (1976) identified from the literature seven characteristics of self-help groups, which are: common experience of members; mutual help and support; the helper and the helped both benefit from the exchange as they share a common problem; reinforcement of self-concept of normality; collective willpower and belief; promotion of information and factual understanding; and constructive action towards shared goals.

Despite their many obvious advantages, self-help groups are criticised. Henry (1978) identified several potential dangers: members may benefit at the expense of similarly suffering non-members; members may learn to cope with their symptoms without challenging existing values; groups may be dominated by particular people or interests and individualism may be stifled.

3.3.2 Patient participation in hospital care with specific patient groups.

3.3.2.1 The elderly

The transition from adulthood to old age is often perceived as a process of loss (Gould, 1972) and may precipitate a decline in competence and control. It is perhaps for this reason that researchers interested in the concept of personal control have carried out studies with elderly populations. These were reviewed by Schulz (1980).

There are broadly three types of relevant studies: experimental manipulations of patient control, participation and responsibility; studies correlating subjects' perceptions of control with variables such as morale; and studies examining the effects of choice in residential change on various outcome measures. All start from the theoretical prediction that decisional control should be positively related to psychological well-being.

Langer and Rodin (1976) carried out a comparative study with 91 elderly American nursing home residents. Subjects in the experimental group were given a communication emphasising their responsibility for themselves, were given freedom to make choices and the responsibility of caring for a plant. Subjects in the comparison group were given a communication emphasising the staff's responsibility for them. Questionnaire ratings and behavioural measures showed a significant improvement for the experimental over the comparison group for alertness, active participation and sense of well-being. Despite being a weak manipulation administered to the group rather than to individuals, enhanced choice and personal responsibility still had an effect. The study can be criticised for not including a no-treatment control group.

In another American study with socially isolated and institutionalised old people, Schulz (1976) randomly assigned subjects to one of four conditions to assess the effects of increased control and predictability. Subjects in three conditions were visited by students over a two month period. Subjects in the control condition could determine the frequency and duration of visits. Subjects in the predict condition were informed when and for how long they could be visited. Subjects in the random condition were visited on a random schedule. Subjects in the fourth condition were not visited and served as a baseline control group. It was found that subjects in the

predict and control groups were superior to the random and baseline groups on indicators of physical and psychological status as well as level of activity. There were no differences between the groups given increased control and predictability.

Taken together, the Langer and Rodin (1976) and Schulz (1976) studies show that increased environmental control has a positive impact on the physical and psychological well-being of the institutionalised aged. This effect is achieved through very different operationalisations of control such as predictability, choice and enhanced responsibility.

Neither study directly concerned nursing, but both deal with aspects of care within the responsibility of nurses. Subjects in both studies were of relatively high socio-economic status (Schulz, 1980), which raises the question of whether control and predictability are important only to those who are likely to have experienced high levels of personal control in earlier life.

Follow-up studies have been carried out on both groups of subjects. Rodin and Langer (1977) found that 15% of subjects in their experimental group and 30% of subjects in their comparison group had died 18 months after the original intervention. Nurses' ratings and health and behavioural indicators also indicated that the processes set in motion by the study had sustained beneficial effects for the original experimental group. In contrast, Schulz and Hanusa (1978) found at two year follow up that improvements had significantly declined after the study terminated. Attempting to explain differences between the two follow-up studies, Schulz (1980) argued that the Langer and Rodin (1976) responsibility intervention encouraged subjects to make positive self-attributions which would increase perceived competence, whereas the interventions in the Schulz (1976) study probably did little to cause subjects to change their overall self-concept.

A second group of studies have examined the influence of locus of control (see section 2.1.4.1) and perceived situational control on various outcome measures. Krantz and Schulz (1980) found that elderly, institutionalised subjects with high self-esteem and internal locus of control were more likely to participate in activities and were rated as healthier by nurses. Similarly, Ponl and Fuller (1980) found that perceived choice within the institution was a significant contributor to morale and social interaction.

In a study designed to examine the relationship of locus of control and perceived situational control to morale, Chang (1978) studied 30 elderly American nursing home residents. Chang found that subjects who perceived

themselves in control of their lives reflected higher morale scores irrespective of their locus of control. Despite Schulz's (1980) suggestion that people with internal locus of control benefit more from enhanced control and predictability, Chang's (1978) findings suggest that increasing the perception of control may be important for all institutionalised elderly people, regardless of locus of control. It should be noted that Chang (1978) used a very small sample and non-random selection of subjects, so it may not be possible to generalise from the study.

Finally some studies have examined elderly people's choice of place of residence. Several descriptive studies have found that adjustment to rehousing appeared more related to whether or not subjects had a choice regarding the new setting rather than to features of the setting itself, (Sherman, 1976; Pohl and Fuller, 1980). Ferrare (1962) produced correlational evidence that aged people who were relocated in a home of their choice lived longer than those sent there without a choice. In a research review, Schulz and Brenner (1977) argued that responses to relocation are mediated by the perceived controllability and predictability of the events surrounding the move and differences in environmental controllability between pre and post relocation environments.

As a group, these very different studies provide powerful justification for giving elderly people more control over their lives, including increased participation in the planning and implementation of their health care.

3.3.2.2 Psychiatric patients

Irrespective of whether a chronic disability, which necessitates long-term hospitalisation, is associated with mental illness, mental or physical handicap or old age, the patients often develop secondary symptoms unrelated to the original disorder. These attendant behavioural deficiencies were first described by Barton (1959) as institutional neurosis. He described the characteristic behaviours as apathetic, passive, unmotivated, submissive, lacking interest and initiative (Barton, 1976).

According to Wing^{and Brown} (1970) the severity of institutional neurosis depends on individual susceptibility, length of stay and the social environment. The social processes associated with the development of institutional neurosis have been described by Barton (1959); Goffman (1968) and Barnes (1968) and include authoritarian staff attitudes, depersonalisation, loss of contact with the outside world, the hospital environment, understimulation, rigid ward routine, lack of nurse-patient interaction (Altschul, 1972) and nurse-patient social distance.

In recent years there has been increasing interest in rehabilitation and the reversal of institutionalism. In one study Wing and Brown (1970)

found that patient activity, choice, autonomy and responsibility were the most important factors in reversing institutionalisation. Similarly, Barton (1976) has suggested that the patients' living environment should encourage participation in planning and decision-making. Institutionalisation is not easy to reverse, at least partly because it provides security for patients. Hersen (1969) tried to increase patients' independence by setting up a self-care unit within a hospital. This generated massive anxiety and childlike dependency among patients who made it clear that they were generally unwilling to accept the responsibility.

However, a study by Cernaglia (1977) demonstrated that the experience of decision-making and self-management could improve the behavioural adjustment of chronic psychiatric patients. 53 patients were randomly assigned to a control or one of two experimental groups. Each group was pre and post tested on measures of self-concept, hospital adjustment and locus of control. One experimental group made and implemented independent decisions about their lives. The second experimental group received group counselling and similar environmental changes as the first group, but no decisions. There was no intervention for the control group. Over four months the group making independent decisions showed some improvement in self-concept scores, a significant improvement in behavioural adjustment and a trend towards more internal locus of control. There were no changes in the other two groups.

The custodial treatment ideology is usually embedded in the medical model of psychiatry which implies a disease process over which the patient can have no control (Brewer, 1974). Therapeutic communities reject this in favour of a social psychiatric approach which acknowledges that the inter-personal and institutional milieu have an important influence. The four fundamental themes which characterise therapeutic communities were described by Rapoport (1960) as democratisation, permissiveness, reality confrontation and communalism. Familiar practices include flattening of the autonomy pyramid, sharing of responsibility, decision making by consensus, and patients becoming active participants in their own treatment (Towell and Harres, 1979).

The Cassel Hospital is an example of a well established therapeutic community. All members participate fully in its daily life. The nurse-patient relationship is reciprocal and democratic. Patients are encouraged to take responsibility for themselves and patients' committees organise much of the running of the community (Barnes, 1968).

One of the "founding fathers" of therapeutic communities, Jones (1979) considered that despite the proliferation of so-called therapeutic communities, decision-making by consensus is more an ideal than



a practice. This was confirmed in a study of decision-making in three in-patient units of an American state mental hospital. Despite written policies that patients were to participate in decision-making about their treatment, Murray (1974) observed that staff exercised power over decisions and that patients' views were ignored.

Other relevant developments in psychiatry include self-medication programmes in psychiatric hospitals (Franclemont and Sclafani (1978) and contract therapy, which demands active participation by the patient in the planning of treatment (Rosen, 1978).

Thus it can be seen that patient participation is a major therapeutic principle in several types of psychiatric treatment and rehabilitation.

3.3.2.3 Medical patients

Two relevant studies were found in the UK. Greer et al (1979) investigated the relationship of patients' psychological responses to the diagnosis of breast cancer, assessed three months post-operatively, to health outcomes after five years. Recurrence free survival was found to be significantly more common among women who had initially reacted to cancer by denial or with a "fighting spirit" (75%) than among women who responded with stoic acceptance or feelings of helplessness and hopelessness (35%). "Fighting spirit" was described by the researchers as optimism, searching for information, planning to do all possible to conquer the disease and lack of apparent distress. Patients' psychological responses were assessed on the basis of the researchers' impressions and therefore have limited validity. It is not possible to infer causal relationships from the study as patients' psychological reactions could have been influenced by the severity of the pathology.

In an experimental study of 229 hospital patients' recovery from myocardial infarction, Cromwell et al (1977) manipulated high and low levels of three independent variables (information about the disease, diversional stimulation, and participation in treatment) with the personality factors of anxiety, locus of control and scanning (i.e. the rate of processing of information from the environment). Complex interactions were found. The length of hospital stay was affected by the overall amount of activity, that is diversion plus participation. Moderate activity resulted in shorter stays than either high or low activity. High levels of participation with specific information resulted in shorter hospital stays than high participation in conjunction with general information. Cooperation with nurses was improved by congruent (according to the researchers) combinations of information and anxiety, that is anxious patients were given high levels of information and non-anxious patients

even low levels of information were more co-operative than those with incongruent combinations. Patient comfort was also greater for congruent combinations of scanning and participation according to the researchers (i.e. high participation for extensive scanners and low participation for minimal scanners).

This study indicates the importance of congruent combinations of participation, information and personality, although the relationships among them require further elucidation. The choice of length of stay in hospital and co-operation with nurses as dependent variables can be criticised. Length of stay may be influenced by administrative constraints and the patient's home circumstances. Co operation with nurses may be seen as a consequence of conformity or obedience to authority rather than necessarily beneficial patient outcome.

3.2.4 Patients with chronic handicap

The "warehousing" model of care in institutions for the long term sick as described by Miller and Gwynne (1973) as care initiated and controlled by staff, with patients apathetic and dependent. They recommended that patients should be allowed independent roles catering for drives towards autonomy to make their lives closer to ordinary experiences. Miller and Gwynne (1973) observed that in institutions which allowed such opportunities, residents seemed more "alive", especially when taking control over their environment and participating in its management.

The importance of nurses encouraging patient participation and self-care in the long term handicapped was emphasised by McCay (1979) who described the tendency of nurses to help patients, but their inability to help patients to help themselves. An account written by a tetraplegic patient, Barnes (1979) confirmed the tendency of hospitals to demand the surrender of self-determination" which leads to a "a sense of nothingness and loss of self". Barnes (1979) wanted to take more responsibility for decisions about his life. Clearly, the opinion of a patient who writes an article is not necessarily typical of all patients, but it does provide some support for Miller and Gwynne's (1973) observations.

4 INFORMATION, EDUCATION AND CONTROL

Much recent research has examined the effects of giving patients information before surgery or other unpleasant medical procedures on various outcome measures. Work on pre-operative and pre-procedural information-giving is considered in this section because of its relationship to patient control.

In a review, Auerbach (1979) argued that providing information could

be conceptualised as a method of enhancing the patient's feeling of being able to exert control and maintain predictability in an uncertain situation. Both Auerbach (1979) and Mills and Krantz (1979) argued that information could be interpreted as increasing cognitive control, because it resulted in the interpretation of an aversive event, so that threat was lessened.

Padilla et al (1981) considered that different types of information provide different types of control: that procedural information is a form of cognitive control; that sensory information provides response control; that coping information provides behavioural control; and that information about choices provides decisional control. These proposed links seem intuitively logical, but have not been empirically tested.

In order to be able to participate fully in their care patients need health and illness related education which is more general than the information given prior to a specific surgical or medical procedure. Aspects of patient teaching which are relevant to patient participation are reviewed later in this section. Finally, studies of patient participation in specific procedures such as blood pressure measurement which are normally carried out by health professionals are considered.

3.4.1 Pre-operative information and recovery

Convincing evidence of the effectiveness of psychological preparation for surgery has been provided by the fairly consistent finding that patients given pre-operative information have a better post-operative recovery on a variety of outcome measures. The area has been reviewed by Auerbach and Kilman (1977); Melamed (1977); and Kendall and Watson (1981).

This work is premised on the assumption that the apprehension and fear associated with the anticipation of surgery, as well as the alarm and distress associated with recovery, may affect patients' reactions and consequent recovery (Gatchel and Baum, 1983).

The experimental paradigm typically used in this type of research is as follows. Patients who fulfil the criteria for inclusion are randomly assigned to one of one or several experimental conditions (types of information) and one or more control groups (general discussion with researcher and/or no treatment). Baseline measures are taken to ensure no differences between conditions on significant variables. The researcher carries out a carefully controlled experimental manipulation. After the surgery or aversive procedure, various physical, clinical and/or psycho-social measures of welfare and recovery are taken. Typically the post-procedural measures are made by a researcher who does not know to which conditions the subject was assigned.

Broadly, three types of information have been given to patients before surgery: sensory information enables the subject to anticipate what will be felt and has been found to reduce distress (Janis, 1969); procedural information informs the patient what will be done and has been found to reduce analgesic consumption (Hayward, 1975); and coping skills information enables the patient to deal with pain and discomfort and has been found to be associated with more rapid recovery (Lindeman and Van Arnam, 1971), reduced analgesic consumption (Healey, 1968) and better reactions to anaesthesia and surgery (Pranulis et al, 1975).

Several studies have compared or combined different types of information, but the results are somewhat equivocal. Boore (1978) found that a combination of procedural, sensory and coping skills information is effective in reducing stress on biochemical and physiological indices. Gilbert et al (1964) found that sensory and coping information given prior to abdominal surgery reduced the need for analgesia and reduced the length of hospital stay. Subsequent studies have demonstrated the effectiveness of sensory information alone and in combination with coping information (Johnson, 1975; Johnson and Leventhal, 1974; Johnson et al, 1973). Ridgeway and Mathews (1982) found that procedural information enhanced knowledge, but instruction in cognitive coping methods was more effective in managing specific worries about surgery. Langer et al (1975) found that patients given cognitive reappraisal instructions, whether alone or with sensory and procedural information required fewer analgesics than those given just information or nothing.

Reviewing studies on different types of information, Gatchel and Baum (1983) concluded that sensory information is more effective in reducing distress than procedural information alone. Coping information is effective in combination with sensory information, as knowing how to cope with pain is only useful when pain is accurately anticipated.

As discussed earlier, information may be seen as a form of control, and one study has examined more directly the relationship between active patient involvement and recovery from surgery. Taylor and Levin (1977) found that breast cancer patients who had a two-stage surgical procedure recovered more quickly than those who had a one-stage procedure. They argued that the difference resulted from increased patient participation in planning and decision making in the two-stage procedure. However, this was not a controlled study and there may have been differences in the severity of disease and amount of general psychological preparation between the two groups of patients, which could account for the results.

The relationship between personality and surgical recovery is not

all understood. One dimension relevant to patient participation is vigilance versus denial i.e. seeking out versus avoiding information. The study found that vigilant patients had a poorer post-operative recovery than deniers (Cohen and Lazarus, 1973). However, Boyd et al (1973) found that vigilant patients made a better psychosocial adjustment to surgery, such as resumption of normal social roles, than passive patients. Andrew (1970) found that patients who engaged in denial made poorer recovery when given information than when not given information. Similarly, De Long (1971) found that information was more effective for vigilant patients than for deniers.

4.2 Information, control and aversive health care procedures

Preparatory sensory information has been found to reduce distress in laboratory situations producing ischaemic pain (Johnson, 1973) and cold pressor pain (Leventhal et al, 1978; Mills and Krantz, 1979); as well as clinical situations such as endoscopic examination (Johnson and Leventhal, 1974), paediatric cast removal (Johnson et al, 1975) and pelvic examination (Fuller et al, 1978).

Combinations of procedural and sensory information have also been found effective in reducing anxiety associated with barium investigations (Wilson-Barnett, 1978) and gastroscopy (Johnson et al, 1973). Procedural and sensory information combined were more effective than procedural information alone in helping patients to cope with gastroscopy (Johnson et al, 1973).

Several studies have directly examined patient choice during aversive procedures. For example, Mills and Krantz (1979) examined stress reactions to blood donation. Subjects were given information (procedural and sensory) and/or the choice of arm to be used for the venepuncture. A combination of information and choice was effective in reducing distress, but either choice or information alone was more effective. Research with blood donors may not be analogous to research with sick patients as the psychology of blood donation is complex (Titmuss, 1970). However, similar findings were obtained in a laboratory analogue also reported by Mills and Krantz (1979).

Padilla et al (1981) showed filmstrips with different types of information to patients undergoing naso-gastric intubation for gastric analysis and also tested their preferences for control. Information which combined procedure, sensation and coping skills was effective in reducing discomfort, pain and anxiety for both control and no-control preference subjects during and after the procedure, but was most effective in reducing intubation distress for subjects preferring no control. There is no obvious explanation for this finding.

Patient participation in a nursing procedure was manipulated in an early study by Tryon and Leonard (1965), who randomly assigned women prescribed a pre-delivery enema to experimental and control groups. Patients in the experimental group were given a more active role in the procedure with mutual planning, consent and exploration of patients' feelings about the proposed enema, although how this was actually done is not clear. The researchers found that acceptance and effectiveness of the procedure and patient satisfaction were increased when the patient was given an active role. Patients had only an illusion of choice and control as they were not free to refuse the enema, which was presented as a medical order. Experimental and control groups also differed on amount of nurse attention, friendliness and helpfulness, which may have been responsible for any differences in outcome between the two groups.

3.4.3 Patient education or teaching

Patient education or teaching is more than just giving information, as previously discussed. It implies an interactive approach in which learning takes place which may subsequently modify behaviour.

The growing literature on patient teaching was reviewed by Cohen (1981) and Wilson-Barnett and Osborne (1983). Reviewing a representative selection of evaluative studies, Wilson-Barnett and Osborne (1983) found that 23 out of 29 reported some benefits for patients, in terms of increased knowledge, physical and psychological well-being, compliance and self-care ability. They suggested that with the increased confidence that results from being taught, patients can behave in useful ways and feel less dependent.

According to Levin (1978), the main difference between patient education and self-care is that the process and outcome of patient education is regulated by professionals, whereas self-care is determined by what consumers perceive as their needs and goals. There is, however, considerable overlap, as much patient education is specifically intended to improve self-care skills and patient participation.

American health education activities associated with self-care programmes were studied by Green et al (1977), who collected information on 16 programmes. Some were comprehensive self-care courses with many teaching sessions and many topics. They included information about disease, health care and life style and taught procedures such as self-medication, emergency childbirth and first-aid. Other courses were oriented to the understanding and management of specific diseases, such as diabetes, hypertension and kidney failure. Teaching included skills, such as insulin injection and urine testing, and relevant knowledge. Other programmes were concerned with preventive or screening activities, such as breast and

cervical self-examination, throat culture, etc. Green et al (1977) commented that all programmes had in common that consumers were taught to take responsibility for tasks previously carried out by health care professionals. Algorithms and check lists were widely used by patients for medical decision-making. Very few of the programmes conducted formal evaluation, so it was difficult to assess their effectiveness.

Descriptive studies have demonstrated the ability of patients to carry out various procedures conventionally performed by health care professionals. For example, Reliszko and Barré (1978) described a centre where patients carried out their own haemodialysis following extensive training. Hetzel et al (1979) described the ability of patients with respiratory diseases to record their own peak expiratory-flow rates.

Patient self-monitoring of blood pressure (BP) has been studied. Wilkinson and Raftery (1978) trained 95 hypertensive out-patients to measure their BP for several months. In a survey, with an 86% response rate, 25 patients reported improved medication compliance as they observed the results of treatment. Most reported no difficulties in measuring BP and most expressed satisfaction at their increased knowledge of their problem. Some consciously relaxed when BP was high and more than half were willing to continue measuring their BP indefinitely.

In a controlled experiment (Carnahan, 1972) one hundred hypertensive patients were randomly assigned to experimental or control groups. There were initially no differences between the two groups in BP or treatment. The experimental group monitored their own BP at home. After three months systolic BP was significantly lower in the experimental group and diastolic BP was (non-significantly) lower than for the control group. In a similar study of 38 hypertensive patients, who were not compliant with drug treatment, the randomly selected experimental group charted their own BP daily, tailored drug doses to BP and were seen fortnightly to reinforce training. After six months drug compliance rose by 21% in the experimental group and fell in the control group. BP fell in 17 out of the 20 experimental group patients. However, the experimental group received significantly more attention than the control group, in the form of fortnightly meetings with a health worker. This may have, at least partly, caused the improvement in compliance.

An educational intervention intended to increase patient participation, as indicated by question-asking during out-patient visits to a physician, as described by Roter (1977, 1979). The patients were 294 Americans, mainly low income, negro, middle aged to elderly women with chronic

diseases. Subjects were randomly assigned to experimental, placebo and control groups. The experimental intervention was a 10 to 15 minute discussion with a nurse or health educator prior to meeting the physician. The intervention was designed to elicit patients' expectations for information, provide an opportunity for patients to rehearse questions, encourage patients to ask questions by providing support and approval and listing questions for the patient and giving the list to the patient.

Tape recordings of the doctor-patient discussion revealed that experimental group patients asked more questions and were more direct, assertive and efficient in asking questions. For the experimental group, doctors tended to word statements as opinions rather than as instructions, in comparison with the non-experimental groups, which may be interpreted as doctors allowing more room in the interaction for patient responses. The doctor-patient interaction in the experimental group was characterised by negative affect, anxiety and anger, compared with mutual sympathy in the placebo group interaction. The experimental group were more likely to keep appointments over several months, moved significantly towards more internal locus of control, but less satisfaction with medical visits than the placebo and control groups.

This simple intervention had a profound effect on the patient-doctor relationship. Although patients adopted a more active role in various ways, they also experienced many negative emotions. This experiment illustrates how rejection of the traditional passive patient role does generate uncertainty and negative affect in both patient and provider, although these may be short term problems.

3.5 FAMILY PARTICIPATION IN CARE

In Section 2.2.4 it was shown that patients' families are expected to adopt a passive role once patients are within the control of the health professionals. Families of hospital patients were shown to experience much stress, which might be reduced by increased involvement in care.

In this section family participation in care is explored further, although very little relevant literature was found. The effects of the family on the patient's illness is considered first. Family participation in practical care is discussed. Group meetings are another method of involving the family in care planning. Finally, family participation in obstetrics and paediatrics are considered, as these are among the few clinical areas where the family is given serious attention.

3.5.1 Effects of the family on the patient's illness

Illness can affect the family as discussed in Section 2.2.4.1, but

the family can also have an effect on the patient's illness.

There is some evidence that spouse involvement in care can have positive effects on patient outcomes. Spouse involvement in the behavioural treatment of obesity resulted in significantly more weight loss three and six months post-treatment, than spouse co-operativeness but non-involvement (Brownell, 1978). Spouse involvement in patient pre-operative teaching prior to gynaecological surgery resulted in significantly greater post-operative co-operativeness and (non-significantly) less patient and family anxiety than for patients given pre-operative teaching without their spouses (Dzivrbejko and Larkin, 1978). Family support and encouragement seem to be important in encouraging compliance with a treatment programme in psychiatric patients (Yoder and Jones, 1982).

Family interaction, attitudes and anxiety have been shown to affect patients' progress. In a small study of myocardial infarction, Ross (1977) found that positive couple interaction promoted feelings of optimism for the recovery of the patient, whereas negative interactions slowed the perceived recovery. Similarly, Litman (1966) in a study of a hundred orthopaedic patients undergoing rehabilitation found that the extent to which the family held positive attitudes and encouraged the patient influenced how well they did. Pessimistic attitudes had a retarding effect on the patient's progress. Doerr and Jones (1979) reasoned that family anxiety could be transferred to patients. Family preparation in the form of written information and discussion with a nurse resulted in a reduction in anxiety transferred to coronary care unit patients compared with a control group.

3.5.2 Family participation in practical care tasks

It is argued that relatives assume the major burden of caring for the sick, particularly in chronic illness, where care is continuous and long term (Locker, 1982). In one study female rather than male relatives were found to provide most of the help received by dependent dying people in the community (Cartwright et al, 1973).

It therefore seems reasonable that relatives should be encouraged and taught to assist in meeting some of the patient's basic needs whilst in hospital. Castledine (1978) argued that as relatives will continue care after discharge, they should be taught the necessary skills during admission. Cockburn (1975) added that teaching relatives simple nursing procedures should be part of the nursing role, as long as both patient and relative agreed. Relatives should be allowed to choose their degree of participation, because some may prefer not to be intimately involved.

There has been little research on how much relatives do assist with hospital care, what patients, relatives and nurses feel about relatives giving care, and the effects of relative care on patient well-being and recovery.

3.5.3 Group meetings for patients' families

Group meetings are one method of increasing family participation in care and providing support, information and education for families. According to Rosenthal et al (1980) any activities that facilitate family involvement are:

"consistent with contemporary nursing philosophy which emphasises the importance of the patient's support systems, including the family, in total patient care".

Several groups have been described in the literature, mostly related to long-term problems. There has been little formal evaluation of the effectiveness of group meetings. Goldmeier et al (1979) described a relatives' and friends' group in an acute psychiatric admissions ward. The authors reported that the meetings allowed questioning, expression of pent-up emotions, greater tolerance and understanding of the patients' illness. A group for relatives of severely burned patients was described by Abramson (1975). This helped relatives cope with the stresses of supporting the patient over a recovery period of up to four years. Groups for the parents of sick children seem to help parents to cope with their problems. Groups for the families of burned children (Cahners, 1979) and for bereaved parents (Fischhoff and O'Brien, 1976) have been reported.

A related development is the idea of inviting the relatives of long-term patients to multidisciplinary meetings to discuss the patient's care. This has the potential to involve relatives both in planning and evaluating care, and has been tried with the relatives of elderly patients (Leeming and Luke, 1977).

3.5.4 Paediatric and obstetric care

There is much descriptive and prescriptive literature about family participation in all aspects of health care and hospital care. However, the very few empirical studies are mostly confined to parental participation in the care of hospitalised children and husband/partner participation in obstetric care.

The beneficial effects of the parents' presence in paediatric wards has long been recognised (Platt Report, Ministry of Health, 1959) but in practice control and care of the child typically shifts from the family to the hospital staff on admission (Kodadek, 1979).

Three American studies have examined methods of increasing parental participation in child care. Strassberg (1978) successfully used written contracts and a system of rewards to enhance maternal involvement in the care of their physically disabled children. Finkelstein (1974) examined ways of involving parents in a residential treatment programme for emotionally disturbed children. Roskies et al (1978) attempted to overcome the psychological barriers thought to inhibit mothers' participation during hospitalisation of their young children for elective surgery. During a pre-admission interview, mothers were given an extra session focussing on the role of the mother during visits. Results indicated that the duration and timing of visits and behaviour during them was significantly altered in the predicted direction for the experimental group.

Family centred maternity care has been described in the American nursing literature as centres which enhance the family's sense of control over what is happening to them, by placing the family at the centre of the health care process (Gay, 1977; Lubic and Ernst, 1978). Henneborn and Cogan (1975) compared the births of 38 women whose husbands were present throughout labour, with those of 11 women whose husbands were present during the first stage only. Women whose husbands were present throughout reported less pain and had a significantly lower possibility of receiving analgesics during delivery. Couples in which the husband was present throughout reported more positive feelings about the total birth experience. The sample of absent husbands was too small (eleven) to produce meaningful results. Moreover correlation does not necessarily imply causation.

A survey of special care baby units and neonatal surgical units in England (National Association for the Welfare of Children in Hospital, 1984) found that 93% of units/wards have abolished visiting hours for parents, compared with 49% of other childrens' wards surveyed during 1982-83. This suggests an active commitment in paediatric units to parental participation in care.

3.6 ATTITUDES TOWARDS PATIENT AND FAMILY PARTICIPATION

3.6.1 The importance of professional attitudes

The opinions and attitudes of health care professionals towards patient and family participation in care is clearly important. Unlike consumer self-care in health, patient participation in illness involves collaboration with hospital staff and is an addition rather than an alternative to professional care. Professional attitudes and the decisions of policy makers are likely to influence the success and acceptability of patient participation to the public.

Both descriptive and prescriptive work have proliferated, mainly in nursing and to a lesser extent in medical literature, which details the advantages of increasing patient and family control over care and encouraging independent care. Examples of British nursing literature which supports this trend include: Charleton (1979); Myer (1976); Smith (1980); Tiffany (1979); and Turner (1977). Examples from the American nursing literature include Boettcher (1978); Benson (1977); Dickens (1978); Lewis (1975); Reeder (1978); Schaeffer (1974); Sovle (1978); and Slavinsky and Romoff (1972).

Typical of this literature is the work of Williamson (1981) who proposed a model of nurse-patient mutual interaction, in which nursing is seen as a collaborative process. This is intended to enhance patient participation and autonomy. The model links the nursing process (see Chapter 4) and patient participation and is suitable for use with any nursing theory as long as its basic assumptions about the rights of patients to self-determination are not violated. Williamson's (1981) ideas have not yet been empirically tested.

Despite the amount of apparent support, there are:

"a good many providers who are openly hostile towards the consumer movement"

(Hamilton, 1982). Self-care is indeed based on assumptions that differ from those of the professionally trained, and this is a potential source of conflict (Levin et al, 1977). Some professionals may even fear diminution of their role, function, expertise and exclusivity (Levin et al, 1977).

Professional apathy may be as great a problem as professional hostility. Jacobs (1980) cited evidence that American nurse practitioners claim to involve the patient in care and operate a patient-centred approach. Reviewing literature on the actual role of the nurse practitioner, Jacobs (1980) argued that there was no evidence that they really involve the patient.

In its definition of health included in its constitution the WHO (1976) stated that:

"informed participation and active cooperation on the part of the public are of utmost importance in the improvement of the health of the people".

The Declaration of Alma Ata (1978) made at a joint WHO/UNICEF international conference emphasised that people of any country have:

"the right and duty to participate individually and collectively in the planning and implementation of their health care".

Similarly the Director General of WHO, speaking in Australia at an international conference on health education, asserted that the prime responsibility of health education is to promote individual and social awareness, leading to involvement and self-reliance, that people should be given knowledge that would enable them to take action and that "mechanisms must be found to involve people". He also argued that lay self-care offered a real potential for improving health status (Mahler, 1982).

This strongly worded support for consumer participation in health care by such influential international bodies as WHO and UNICEF provides further justification for developing research into patient participation in nursing.

3.6.2 Studies of nurses' and doctors' attitudes

Several studies of staff attitudes were found. Linn and Lewis (1979) sent Likert-type attitude scales and a health locus of control measure (Wallston et al, 1976) to 520 Los Angeles physicians in family practice. The scale was checked for validity and reliability. Physicians with the most positive attitudes towards patient self-care tended to be under 46 years old, Jewish, working in group practices and with a tendency to internal locus of control. Physicians with the least positive attitudes to patient self-care tended to be over 46 years old, Protestant, worked in single practices and tended to have externally controlled health beliefs. Linn and Lewis (1979) developed a useful attitude scale, which could be used in other studies. However, their survey achieved only a 36% response rate. As anonymous, they were unable to employ a follow-up procedure, or examine differences between responders and non-responders. It is possible that the data were systematically biased by non-random non-response.

A scale to measure nurses' attitudes towards patients' rights and nursing autonomy was developed by Pankratz and Pankratz (1974). They administered a 69 item Likert-type scale to 702 American nurses in different work settings. Factor analysis revealed three subscales: nursing autonomy and advocacy; patients' rights; and rejection of traditional role limitations. More positive attitudes tended to be associated with high standards of education; senior post, employment in a university hospital and non-traditional social climate, such as psychiatric nursing. They argued that education for nurses tends to be a liberalising force.

The Pankratz and Pankratz (1974) scale was administered to 133 nurses (115 women and 18 men) who qualified in Norway in 1980 (Fagermoen and Nord (1984). On the nursing autonomy and advocacy subscale, men scored higher than women, and younger women scored higher than older women. On the patients' rights sub-scale men again scored higher than women and older

nurses scored higher than younger. On the rejection of traditional role limitations sub-scale men again scored higher than women and nurses in long-term care scored higher than nurses in acute settings. Reasons for the consistently higher scores of male nurses is unclear, but the sample of men ($n = 18$) is so small that it is unrepresentative of male nurses in general.

A study of nurses' attitudes regarding the patient's role in decision-making was carried out by Citron (1978). Four patients' Bills of Rights (see Section 3.2.2) were used as the basis for developing the 30 item scale. The respondents (150 American staff nurses) generally agreed with the concept of patients' rights. However, responses to the items that reflected their approach to daily routines frequently indicated behaviour antithetical to these beliefs. Citron (1978) explained this by the fact that values were formulated within an educational system that dealt with ideals, whereas nursing practice took place in the context of reality. This discrepancy points to a major problem with attitude measurement, especially in the measurement of such a value laden topic as patient and family participation in care.

An American study of variations in attitude according to nurses' grades was carried out by Gilbert and Levinson (1957) who designed an instrument to measure custodial versus humanistic mental illness ideology. Nursing aides had the highest level of custodialism, followed by student nurses, then qualified nurses. Psychiatrists scored lowest. Higher status staff tended to be more idealistic and humanistic, which may be a function of education and intelligence, but may also reflect their distance from the practical problems of everyday patient management.

As each scale described measures a slightly different (although related) attitude, it may not be valid to compare their findings. Nevertheless, it is noteworthy that in at least two studies, positive attitudes were associated with seniority and higher educational qualifications.

3.6.3 Studies of patients' preferences and perceptions

Studies of illness behaviour have shown that patients' attitudes towards medical care influence their response to health services (e.g. Rosenstock and Kirscht, 1979). It has also been shown that when patients' expectations are not met, the results may be lowered satisfaction and decreased compliance with medical advice (Korsch and Negrete, 1972).

Despite the increasing tendency to promote self-care, provide patients with information and increase their responsibility, relatively little is known about the relationship between patients' attitudes and the outcomes of these types of approaches.

Krantz et al (1980) reported the development of the Krantz Health Opinion Survey, a measure of patients' preferences for different treatment approaches. The scale contains two relatively independent sub-scales, one of which measures preferences for behavioural involvement, defined as self-care and active participation in medical care, and the other sub-scale measures preferences for information. The researchers reported that at the time of publication, the scale was experimental and required further testing before its full validity and predictive potential could be assessed. Unfortunately the questionnaires for the present study had already been designed before this paper was published, so it was not possible to incorporate any of the items from the Krantz Health Opinion Survey into this survey of patient and family participation in care.

Chang (1978) reported that a literature search found no measuring instruments to assess patients' perceptions of whether or not activities are determined by them. She developed a scale to measure perceived situational control of daily activities in an institutional setting for the elderly. The scale consists of a semi-structured interview schedule including 22 items on who determined time, place and amount of assistance necessary for a range of daily activities, such as dressing, walking, socialising, solitary activity, etc. Not surprisingly, factor analysis revealed two main factors: control of physical care; and control of socialising and privacy. This tool would need to be modified for use with patient groups other than the elderly. Both the scales described in the section have been developed and tested on American patients, and would need to be rewritten for use with British patients.

PART 1. CHAPTER 4.

NURSING PROCESS, THEORIES AND EVALUATION : A REVIEW.DISCUSSION OF THE LITERATURE REVIEW.

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PART 1. CHAPTER 4.

NURSING PROCESS, THEORIES AND EVALUATION : A REVIEW

This chapter begins with an attempt to define nursing. The second and major section discusses the nursing process (NP), including a critical examination of the concepts and an attempt to evaluate its effects. Patient and family participation in NP are considered. The third section of the chapter consists of a short discussion of nursing theories, of which Orem's self-care concept is particularly relevant to this study. The final section considers the evaluation of nursing care; that is, how the quality of care may be measured. The chapter concludes with a discussion and attempt to integrate the literature reviewed in the last three chapters into a framework for this study.

4.1 NURSING DEFINED

The word nursing has different meanings in different languages, suggesting that to a large extent it is a culturally determined activity (McFarlane and Castledine, 1982). The Latin etymon "nutrire", meaning "to nourish" is an indication of the essential meaning of nursing.

In describing nursing it has become usual to quote Henderson (1969) who wrote that:

"the unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible... this part of her function, she initiates and controls, of this she is master. In addition she helps the patient to carry out the therapeutic plan as initiated by the physician".

Important points that can be abstracted from Henderson's definition include: that nursing is concerned with well people (in a preventive capacity) as well as sick people; that nursing focuses on activities which people normally do for themselves - basic human needs; that the role includes physical and psychological assistance and teaching and that patients' independence is an important goal of care.

McFarlane (1980) suggested that Henderson's definition of the unique function of the nurse has been widely accepted as a basis for discussion and is taught to most nurses at an early stage of training. McFarlane (1976) described nursing as helping, assisting, serving and caring. Indeed, the Report of the Committee on Nursing (Brigg's Report) (DHSS, 1972) described nursing as the major caring profession. McFarlane and Castledine (1982) pointed out that nurses are concerned with the health of communities as well as individuals.

Confusion exists about the difference between the roles of doctor and nurse. Many members of the public and of the health care professions still hold an inaccurate stereotype of nurses as curative and ancillary to doctors. For over a hundred years nurses have recognised that their primary concern has been for the person who is ill rather than the illness itself (Nightingale, 1859). The emphasis has always been on caring rather than curing. Paradoxically, the idea of nursing theory and knowledge as distinct from, rather than just an extension of, medical knowledge is new (Chapman, 1976). Henderson (1969) accepts that part of the nurse's role concerns giving treatments initiated by the physician, but unlike the popular stereotype, sees this as a secondary role. Kelly (1966) neatly distinguished between medical and nursing roles: doctors are primarily concerned with aetiology and alleviation of symptoms; nursing concerns itself with meeting the needs of the person afflicted by the disease process, rather than with curing the disease itself (Kelly, 1966).

4.2 NURSING PROCESS

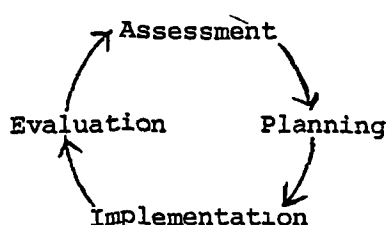
4.2.1 Introduction and definitions

This review of the literature on NP is necessarily selective and incomplete. In 1976 the WHO retrieved 3354 titles relevant to NP in a literature search (WHO, 1981) and since then interest has escalated. Much of the enormous volume of literature is descriptive or prescriptive but there are few empirical studies or critical analyses of the relevant concepts.

The term nursing process refers to a relatively recent attempt to describe a conceptual framework or model around which nursing can be organised. It is important to note that NP is not concerned with the content of care, only with the structure within which the content is organised. There are many different definitions of NP, all of which describe it as the application of a problem-solving approach to care. In its simplest form NP consists of the collection of relevant information about the patient which enables the nurse to identify his or her problems. Nursing actions are planned to overcome these problems and meet pre-determined objectives. Care is given and finally the patient's progress towards the goals is evaluated. The phases of the nursing process are seen as occurring in cyclical motion (Schaeffer, 1974) as illustrated in Figure 4.1.

Figure 4.1:

The stages of the
nursing process



A definition by the WHO Regional Office for Europe, medium-term programme in nursing/midwifery in Europe (WHO, 1977) encompassed most of the main points:

"The nursing process is a term applied to a system of characteristic nursing interventions in the health of individuals, families and/or communities. In detail, it involves the use of scientific methods for identifying the health needs of the patient, client, family or community and for using these to select those which can most effectively be met by nursing care; it also includes planning to meet these needs, providing the care and evaluating the results.

The nurse in collaboration with other members of the health care team and the individual or groups being served, defines objectives, sets priorities, identifies care to be given and mobilizes resources. She then provides the nursing services either directly or indirectly. Subsequently she evaluates the outcomes.

The information feedback from evaluation of outcomes should initiate desirable changes in subsequent interventions in similar nursing care situations. In this way the nursing becomes a dynamic process, lending itself to adaptation and improvement".

One important point that is clear from this definition is that the NP model of care is applicable for nursing interactions with families and indeed whole communities as well as for individuals.

NP has been variously defined by nurse theorists, but McFarlane (1980) suggested that the differences in the elements they identify are related to terminology rather than substance. Orem's (1971, 1980) three steps are discussed later in this chapter. Rogers (1970) saw NP as a series of nursing actions that include data gathering, making a nursing diagnosis, setting long and short-term goals, and initiation of nursing interventions. NP for Roy (1976) involved assessment, planning, intervention and reassessment or evaluation. King (1971) presented a process of human interaction rather than a problem-solving process. She defined NP as:

"a series of acts which connote action, reaction and interaction. Transactions follow when a reciprocal relationship is established by the nurse and the patient in which both participate in determining the goal to be achieved in a specific situation".

It has been argued that good nurses have always adopted this approach at an intuitive level, but there is no evidence that they have done so. NP makes the steps explicit and replaces "routines and rituals" by individually tailored care plans. Crow (1977) saw NP as allowing nurses to look scientifically at how to solve problems with which they are presented. This changes nursing from an art to a science. A profession cannot operate at the level of ritual and conventional wisdom. As Lewis (1968) wrote:

"nursing process can be a key to the kind of care which characterizes professional nursing and can give assurance that nursing care is designed to meet the needs of the patient".

Clear recording at each stage of the process is an important element in the model.

4.2.2 Theoretical background to nursing process

There is no single theory of NP. As Yura and Walsh (1978) wrote:

"Many different theories from various disciplines suggest a relationship to the nursing process. These include general systems theory, decision and problem-solving theories, theories of perception and human need theories. General systems theory seems to be applicable in a broad way. Information, communication, decision and problem-solving theories stem from general systems theory and give support in a more specific manner".

In this section general systems theory is outlined as this appears to be the theoretical framework from which NP is derived. Human needs theory is discussed as this adequately describes the theoretical substance or content of NP.

4.2.2.1 General Systems theory

General systems theory was developed by von Bertalanffy (1937). It is the result of a formulation of principles valid for all systems, regardless of the nature of the relationship between their component elements. The aim of the theory is to integrate the various fields of science with unifying principles that extend vertically through each individual science.

A system is viewed as an entity composed of inter-related interacting components and comprising:

purpose - that which must be accomplished and gives direction to the system.

content - the parts that make up the system;

process - the operation of the system.

Other concepts pertaining to general systems theory, but beyond the scope of this review include input, output, information, feedback, open and closed systems, energy and matter, entropy and negentropy.

A system may be composed of sub-systems, each designed to carry out a purpose, which in turn is necessary in achieving the general purpose of the system. Nursing may be seen as a sub-system within the health care system. Society can be considered the supra-system of the health care system. A system or sub-system operates cooperatively in conjunction with other systems.

General systems theory provides a useful framework for the study of nursing (Yura and Walsh (1978)). The concepts and principles of general systems theory offer a decision-making structure as well as a set of strategies that could be used to arrive at a decision. The stages of NP are a practical application of the problem-solving method.

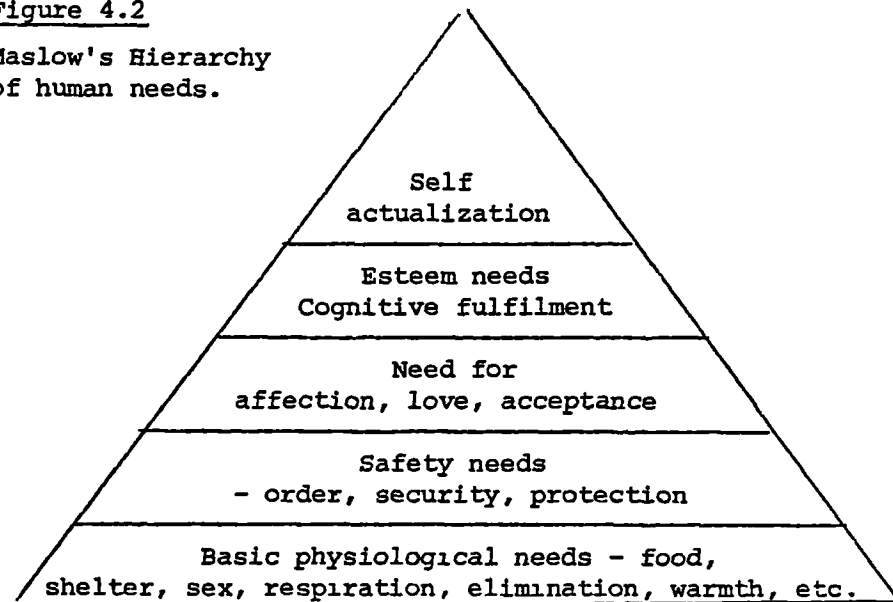
4.2.2.2 Human needs theory

Montagu (1970) described a human need as an internal tension resulting from an alteration in some state of the system. This tension expresses itself in goal-directed behaviour that continues until freedom from tension is achieved.

Maslow's (1943) theory of human motivation, derived from humanistic psychology, proposed that humans have a hierarchy of needs summarised in Figure 4.2

Figure 4.2

Maslow's Hierarchy
of human needs.



The theory assumes a constant quest for need gratification. Needs further up the hierarchy cannot be satisfied until the lower needs are met. Self-actualization is seen as the ultimate goal and is achieved only by the most mature and intelligent.

Maslow's ideas have been influential in nursing but the theory can be seriously criticised. It is not empirical and not easily testable. His ideas about self-actualization are elitist and were derived from a small and highly abnormal sample.

4.2.2.3 Human needs and nursing

Maslow (1970) argued that illness does not merely affect organs but is a state of the entire person. Although some needs have a physiological basis, all motives are states of the whole person and can be understood only in those terms.

Henderson (1969) considered that "nursing has its roots in fundamental human needs" which in health can be met unaided. She wrote that the nurse's function is to help the patient to meet those needs as they are affected by his illness. Henderson (1969) described fourteen basic

needs of all patients which are: breathing, eating and drinking, eliminating, mobilising, rest and sleep, dressing and undressing, maintaining normal body temperature, personal cleansing and grooming, avoiding dangers in the environment, communicating, religious and ethical needs, work, recreation, and learning.

Roper (1976) described a model of nursing based on activities of daily living, very similar to Henderson's list. She considered that these needs have physiological, psychological and social components. Other writers have developed sets of motives or needs within a holistic view of man, e.g.

Yura and Walsh (1978) .

Lewis (1977) and others have suggested the use of Erikson's (1950) eight ages of man and the associated tasks of development to determine the needs of patients at different stages throughout the life span. Havighurst's (1953) developmental tasks are a similar framework for assessing the needs of humans.

It may be artificial to distinguish between nursing needs and human needs. Stevens (1979) suggested that nurses deal with all of man's needs - physiological, psychological, social, cultural and spiritual, in relation to health or illness-related deficits.

4.2.3 Historical development of nursing process

NP originated in the USA and its historical development there has been well documented. The first part of this section deals entirely with American literature. British and European interest in NP is of more recent origin and has been influenced by American work. Because of its recent introduction there is little historical material on NP in Britain. British literature is discussed separately and an attempt is made to explain Britain's slow development compared with the USA.

4.2.3.1 USA

Pre-1948

Henderson (1973) saw the origin of NP in the case study in Jensen's (1929) handbook and she also acknowledged the contribution of Goodrich's public health nurse programme at Yale University. In 1937 a curriculum guide for schools of nursing prepared under the guidance of Hassenplug and later Henderson introduced a section on planning individualised care. In 1939 Harmer and Henderson incorporated the concepts of NP in a new edition of their textbook. Bloch (1975) recorded that in 1939 Derryberry introduced the idea of evaluating nursing care.

1948 - 1960

Culica (1972) identified three main stages in the evolution of NP, of

which this period was described "as a means of communication". NP was used primarily to ensure continuity of care. The emphasis was on the care plan as a product of team nursing under the leadership of a professional nurse (Culca, 1972). As university schools of nursing developed, nursing care plans as a learning activity assumed greater importance. Hall (1955) speaking about quality of nursing care stated as a basic assumption that "nursing is a process". In 1960 Henderson's "Basic Principles of Nursing Care" was published, with its discussion of patient care planning.

The 1960's

This period was identified as the second stage in the evolution of the NP "as a means of professional assessment" (Culca, 1972). There was a greater emphasis on objectives. Lambertson (1964) saw nursing as based on scientific principles and appreciated the need for long and short-term planning with participation by the patient and family. Orlando (1961) was one of the earliest authors to use the term NP and discussed it in great detail. Despite her pioneering effort the term was not immediately adopted. Knowles (1967) described a model of the activities in which a nurse engages, using similar stages to those currently recognised as NP. In 1967 a nursing faculty group at the Catholic University of America identified the phases of NP as assessment, planning, implementation and evaluation (Yura and Walsh, 1967).

During the period 1964 - 1967 an interdisciplinary group at the University of Colorado published papers on the clinical inference process as it referred to nursing, e.g. Kelly (1966). This group described nursing assessment, diagnosis and the planning of care. The development of nursing histories was also studied e.g. McPhetridge (1968).

The 1970's

This third stage in the evolution of NP was described by Culca (1972) "as a diagnostic tool linked with a multidisciplinary approach", although Culca (1972) could not realistically evaluate this period at the time of writing. By the 1970's the major concepts of NP were already well established and it remained only for specific elements to be elucidated. Many significant contributions were made e.g. nursing diagnosis (Gebbie and Lavin, 1975); nursing orders and care plans (Mayers, 1972); and nursing evaluation (Phaneuf, 1976).

4.2.3.2 Britain

Progress in British nursing has traditionally been concerned with administration and education, rather than with the content and practice of nursing. This attitude is illustrated by the British career structure in

which the most senior position in hospital clinical practice, with few exceptions is the ward sister grade.

From an examination of the literature, Clark (1978) found that nursing care planning is a new development in Britain. She identified several reasons, including the structure of nursing; the lack of educated recruits to nursing; and the fact that nursing is predominantly female. Until recently academic facilities needed to stimulate scholarly debate have not existed in nursing and there are still very few graduates in nursing (Hayward, 1982). In addition a strong resistance to change exists within nursing, and an attitude of anti-intellectualism and anti-Americanism is widespread according to Clark (1978). These factors explain, at least in part, why Britain has lagged behind the USA in the development of NP.

NP was hardly mentioned in the European literature until the 1970's. The most significant influence has come from the WHO Regional Office for Europe's medium-term programme in nursing/midwifery which includes a major research study organised around an NP model (WHO, 1977; WHO, 1981). This study has stimulated widespread discussion and interest.

The students on the Diploma of Advanced Nursing Studies at Manchester University were the first British nurses to explore the academic aspects of NP (Hargreaves, 1975). In 1977, the University of Manchester Department of Nursing held a National conference and workshop to explore the use of NP and found little evidence of its practical application in Britain.

American books and journals are available in Britain and many British nurses have learned from them. The first major British articles to create an impact were considered by Castledine (1981) to be the papers by Crow (1977) derived from an academic thesis. Academic analyses of NP have so far mainly appeared in journal articles and theses eg. McGilloway (1980) and Darcy (1980). The first British book on NP was Kratz (1979) and later books included Hunt and Marks-Maran (1980); Long (1981); Roper et al (1981); and McFarlane and Castledine (1982). All these books are characterised by a practical style aimed at the clinical nurse.

4.2.4 Analysis of the components of NP

In this section the four stages of NP are described and critically analysed. The ability of nurses to use this approach is also considered. Although each element is examined separately, they are not discrete entities, but overlap and inter-relate.

4.2.4.1 Assessment

Nursing assessment forms the basis for the rest of NP. It does not

focus on the medical diagnosis, but on problems that arise from the diagnosis, treatment and prognosis, and psychosocial components of the illness and its treatment. The patient's physical, psychological and social functioning are all assessed. WHO (1976) identified four phases in assessment: data collection; classification of data; inferring from data; and statement of patient needs. Each is discussed below.

Data collection

The main instrument for data collection is the nursing history or patient assessment form compiled from information provided by the patient and/or family. The family may be an important source of data (Marriner, 1979). The history is usually taken by the nurse responsible for establishing the plan of care and is obtained during an interview. Castledine (1981) found that assessment often took the form of direct questions and answers. The Rcn (1979) recommended a systematic format, but a semi-structured format allows further exploration of important questions. Crow (1979) suggested that the history should normally be taken within twenty-four hours of admission, but McFarlane and Castledine (1982) recommended a two stage approach. Shortly after admission they obtain just enough information to initiate care. They later undertake a more comprehensive assessment.

Taking a nursing history is thought to have several advantages (Mayers, 1978). It provides the information needed to plan care; it commences the nurse-patient relationship; it stimulates the patient to become involved in his or her care and be cooperative; and it economises on care by producing a document available to all nurses. In an American study designed to compare the effect of using a nursing history form with an unstructured nursing assessment Hefferin and Hunter (1975) found that the introduction of the structured history form increased the total number of patient problems identified, but did not increase the number of social and psychological problems identified. They also reported that problem statements tended to be vague. This suggests that forms alone are not sufficient to ensure that problems are comprehensively assessed. It also points to the particular difficulties nurses have with psychosocial assessment.

Most nursing history forms are produced at local level in response to local requirements. Some textbooks include specimen history forms e.g. McFarlane and Castledine (1982). Some forms have been developed for particular types of patients, such as psychiatric patients (Smith, 1980; Tissier, 1984).

Some hospitals have experimented with patient-completed assessment

forms. In a comparative study Aspinall (1975) found that data thus obtained compared favourably with data from a nursing interview. Apart from the inability of some patients to complete an assessment form, Crow (1979) commented that this would reduce nurse-patient interaction on admission, possibly stunting the development of a relationship.

Roper et al (1981) suggested that in addition to the usual biographical and health data, the nursing history should include an assessment of each of the activities of living identified in her model of nursing. Darcy (1980) preferred the term "needs analysis" in preference to assessment. This he carries out in relation to Roper's (1976) activities of living, which are critically analysed against the background of the patient's illness, social circumstances, perception, personality, education, religion and treatment. Darcy (1980) identified three types of needs: those the patient can meet unaided; those he or she can meet with limited aid; and those he or she is unable to meet. Another basis for assessment is implicit within the Roy adaptation model. According to Roy (1976), man adapts to illness in four ways - physiologically, in terms of self concept, in role function and in dependence. Nursing assessment should thus examine these four adaptations.

Other sources of data may be used in the assessment. There are scales which provide detailed information on specific problem areas e.g. susceptibility to pressure sores (Norton et al, 1975); the Glasgow coma scale and the Nutritional Status scale, cited in McFarlane and Castledine (1982). The nurse makes observations of the patient's physical, social and psychological condition. Medical records, community nursing records, previous hospital records and the results of investigations are all useful data sources.

Classification of data

Lewis (1978) suggested using a typology as a guide for data classification to avoid relying on memory. Suitable typologies include Henderson's (1966) Activities of Daily Living; Roper's (1976) Activities of Living; Abdellah et al (1960) 21 nursing problems; and McCain's (1965) functional ability approach.

Nursing problems have been classified in various ways. Rumbold (1982) classified them according to cause and amenability to nursing actions. Hunt (1978) and Roy (1974) classified problems according to cause - physical, psychological, social or economic. Mayers (1978) divided problems into actual, potential or possible.

Inferring from data

The history and other data are examined in order that nursing problems

may be identified. The nurse makes inferences based on groups of cues revealed during data collection and classification. The significance of these cues must be interpreted in the light of the nurse's professional knowledge.

It should be noted that a need is not necessarily a problem (Yura and Walsh, 1978). The two words are often misunderstood and used interchangeably. The word "need" refers to a requisite for bodily or psychic functioning as in Henderson's (1966) basic human needs. A "problem" arises when a "need" is not met, or is met inadequately.

The successful use of NP is dependent on the nurse's ability to identify problems. Kissinger^{and Munjas} (1981) argued that problem-solving abilities vary according to cognitive style, intellectual skill and information storage. Duberley (1977) suggested that nurses working within a medical model would have difficulty in defining nursing as opposed to medical problems.

In an American study, Aspinall (1976) asked 187 qualified nurses to identify all actual and potential problems from a completed nursing history. Aspinall found a direct relationship between the nurses' educational background and the number of problems they identified. In a similar British study, Crow (1980) compared the abilities of undergraduate and state registered nurse (SRN) students to identify problems and suggest interventions from a completed nursing history. She found that both groups could identify biological and potential problems and suggest interventions equally well. The undergraduates were better able to identify social, psychological and all types of actual problems. Further investigations showed that the teachers of degree students encouraged creative thinking more than the teachers of SRN students. Taken together, these two studies suggest the importance of nurses' educational preparation in determining their ability to infer problems from nursing histories.

Identification of problems

Having collected, classified and inferred from the data, the nurse formulates the nursing diagnosis, which is a statement of nursing problems which form the basis for the care plan. Cormack (1980) noted nurses' reluctance to use the word diagnosis in any context other than medical. However many writers consider that the idea of a nursing diagnosis is legitimate and appropriate. The classification of nursing diagnosis is an area of interest in the USA to which Campbell (1978) and Gebbie and Lavin (1975) have contributed significantly.

The statement of the nursing diagnosis should include identification of the problems, their causes, and the patient's responses to them (Hunt and Marks-Maran, 1980). The problem statement may be written as multiple

problems or using a central problem approach (Crow, 1979), but the former is more common.

Several writers emphasise that the existence of problems must be validated (Yura and Walsh, 1978; Crow, 1979). Subjective validation involves confirming the existence of the problem by checking with the patient and/or family. Malloy (1976) argued that a condition may be perceived as problematic by the nurse, but not by the patient, or vice-versa, resulting in distress for the patient and conflict of goals. If problems are insoluble, this may be distressing and patients may dislike the labelling implicit in problem identification. Objective validation involves checking against objective data sources, such as signs and symptoms.

4.2.4.2 Planning

Care planning is usually performed by the nurse who assessed the patient. Nursing care planning meetings and multi-disciplinary planning meetings are also useful (Marriner, 1979). Planning care was divided into four stages by Crow et al (1979) - determining priorities, setting goals, selecting nursing actions and writing the care plan.

Determining priorities

Berggren and Zagornick (1968) wrote that nurses must establish a hierarchy of problems. This provides a basis for selecting what to do when, which is essential when time is limited (Lewis, 1977). One simple classification is into high, medium and low priority (Yura and Walsh, 1978). The more life-threatening the problem, the higher the priority assigned to it. Maslow's (1943) hierarchy can be used assigning highest priority to the problems at the bottom of the hierarchy.

Goal setting

The terms "expected outcome" and "nursing objectives" are synonymous with goals. Mayers (1972) described goals as:

"the standard against which the success or failure of the nursing regimen is evaluated ... absolutely essential to any evaluation of care".

Yura and Walsh (1978) recommended the statement of long-term and proximate or short-term goals. Short-term goals encourage the patient by enabling him or her to achieve early success. Goals and means to achieving them must be acceptable to the patient (Ren, 1979; Marriner, 1979).

Well formulated goals are realistic; patient-centred i.e. indicate what changes are to take place in the patient's condition or behaviour; concisely stated; include a time element; and include the criteria for evaluation (Crow et al, 1979). A date for the evaluation of each problem should be included in the goal (Hunt and Marks-Maran, 1980).

Selecting nursing actions

The nurse next decides what care is required to achieve the goals. He or she draws on professional knowledge and experience; consults experienced nurses; and refers to appropriate literature. The nursing actions selected will also be influenced by hospital policies, doctors' instructions, the patient's medical condition, and equipment and resources available. The choice of nursing actions should be communicated to the patient and its acceptability to him or her considered (Crow et al, 1979).

Writing the care plan

The care plan is the documentation for the planning, implementation and evaluation stages of NP. Care plans are thought to be beneficial because they:

- help to individualise care (McFarlane and Castledine, 1982);
- help in establishing priorities (McFarlane and Castledine, 1982);
- are an aid to systematic communication (McFarlane and Castledine, 1982);
- facilitate supervision of junior nurses (Harr and Hastings, 1981);
- are essential to the continuity, co-ordination and organisation of care (Harr and Hastings, 1981);
- assist in the evaluation of care (Little and Carnevali, 1976);
- contribute to staff development by helping nurses to adopt a critical problem-solving approach (Little and Carnevali, 1976);
- are a source of reference for part-time staff and clinical teachers (Collingwood, 1975); and they
- enable nurses quickly to assess the condition of newly transferred patients (Collingwood, 1975).

There is no standard care plan format and most hospitals and community services develop what is most appropriate to their needs. Despite variations in terminology, most care plans provide space for documentation of each of the major components of NP. Weed's (1968) problem-oriented medical record (not specifically designed for nursing) was described as the SOAP model in which S is subjective description of problem; O is objective description of problem; A is assessment and diagnosis of problem and P is plan of care. Cormack (1980) advocated extending this to SOAPE with the additional E being the expected outcome or criteria for evaluation. Little and Carnevali (1976) suggested that the care plan be produced under the headings of problem, objective, approach and response. Roper et al (1981) recommend listing the Activities of Living down the left-hand side of the paper. Then columns are drawn up for problem, goal, intervention and evaluation.

In addition, there may be a record of activities actually carried out with the patient. This is to confirm that planned interventions were given, when and by whom, or why not (Roper et al, 1981). This is sometimes called a daily nursing activity record (Hunt, 1978).

In addition to the problem-oriented care plan described above. McFarlane and Castledine (1982) considered that two other types of care plans could be useful. The daily care plan is a detailed statement of what a patient will achieve at specific times each day. They recommend its use with disorientated patients who need a daily routine, and as preparation for transfer home. The standard care plan is a "checklist of the routine care ... to give a patient, irrespective of his specific needs" (McFarlane and Castledine, 1982). It is based on research findings and previous experience and is particularly useful for standard procedures such as pre and post-operative care, gastroscopy and barium enema, etc. Both these types of care plans could be used in addition to the problem-oriented care plan.

The care plan should be updated regularly (Marriner, 1979). It should be used by all nursing staff, including night nurses (Schaeffer, 1974). Some writers argue that it should be kept at the patient's bedside (Duberley, 1979), while others are opposed to this view.

It appears that care plans can facilitate high quality care, if compiled and used by nurses with a high level of knowledge and skills using valid and reliable information. Tucker (1978) argued that students lack this body of knowledge. Following a period working as a nurse observer, Palisin (1971) concluded that care plans were a "snare and delusion". She found that care plans were used mainly for physical care. There was little attempt to use care plans for patients' psychological problems, rehabilitation or discharge planning. Nurses tended to rely too much on information in the care plan rather than discussing problems with the patient. Instead of being an efficient method of communication, Palisin (1971) found that care plan entries were interpreted according to nurses' attitudes and philosophy of nursing, leading to conflict between staff. Palisin concluded that the most important tool in the individualisation of care was not the care plan, but nurses' abilities to assess and interact with patients. In another study Stevens (1972) observed that nurses tended to judge care plans solely by their patients' outcomes, although the outcomes could be affected by numerous uncontrollable variables. Failure in outcomes made nurses reluctant to verbalise future care plans. He also observed that nurses erroneously considered that there could only be one correct way of giving care to achieve a desired outcome.

4.2.4.3 Implementation

This stage of the NP may also be termed nursing actions, nursing strategies or nursing orders (Yura and Walsh, 1978). Implementation of care, as part of the NP refers to intentional care designed to meet objectives, as opposed to routinised care without explicit objectives (Lewis, 1968).

The implementation of care is largely determined by patients' problems and goals. Other factors which may influence care include medical diagnosis and treatment, the doctor-nurse relationship, hospital policies and resources available (Duberley, 1979) and the patient's level of dependence (McFarlane and Castledine, 1982).

The organisation of nursing work in wards

Figure 4.3 represents a model of how nursing work is characteristically organised in hospital wards. The various approaches are arranged along a bipolar dimension with the left representing a task or functional orientation and the right a more individualised patient orientation. Many nurses confuse these ward organisational strategies with NP, erroneously assuming patient allocation and primary nursing to be synonymous with NP. Although the model illustrates that moving towards the right of the continuum facilitates the use of an NP approach to care, in principle NP and the method of organising nursing work could be independent. Using patient allocation or primary nursing, care could be given in a random unplanned fashion. Similarly, NP could exist within a functional system, Although contrary to the philosophy of NP, the nurse in charge could produce care plans for patients, but allocate work as tasks.

Figure 4.3

Methods of organising nursing work in wards:

→ — — — — — → facilitates use of nursing process → — — — — — →

| | | | | | |
|--------------------|----------------------------------------------|-------------------------------|---------------------------------------------------------|-------------------------------------------------------------|--------------------|
| task allocation | nurses work in two or more teams | nurses work in pairs | patient allocation for one shift or one day | patient allocation for several days or weeks | primary nursing |
|--------------------|----------------------------------------------|-------------------------------|---------------------------------------------------------|-------------------------------------------------------------|--------------------|

Task or
functional
orientation



Individualised
patient
orientation

Task Allocation

Task allocation is the most traditional method, which was the accepted practice in most hospitals until recently. It can be defined as a:

"system of assigning nursing activities by specific task usually on the basis of the qualifications and experience of the staff"

(Grant, 1979). This method developed from an industrial model of nursing, which emphasises maximum efficiency. Patients receive care from a number of nurses, none of whom have time to get to know the patients well (Hunt, 1978). Care is fragmented and no nurse sees the patient as a whole to assess all the needs. Needs that fall outside the normal range of tasks tend to be ignored.

Task allocation is the most extreme example of non-individualised, routinised care. Pembrey (1980) cited evidence that non-individualised nursing is linked to failure to meet patients' needs e.g. Jones (1975), Kratz (1974) and Reed (1976). Similarly, Heath and Law (1982) quoted studies supporting their assertion that routines are ineffective, e.g. Hamilton-Smith (1972) and Le-Lean (1973). Ashworth (1982) observed nursing in wards using a functional approach prior to the introduction of NP. She found that nursing records contained general, routine and non-specific information, and little information that could provide continuity of care. She observed little evidence of problem-solving, problem prevention, or a relationship between nursing activities and patient well-being.

Team nursing

When nurses are divided into two teams, this has the advantage that the patient has only half the number of caregivers, thus increasing nurse-patient contact. Work is usually allocated as tasks within teams. According to Logsdon (1973) there is still diffusion of responsibility and minimal individual accountability.

Nursing in pairs

A pair of nurses, preferably one senior and one junior, take responsibility for a group of patients. This works well if the senior nurse teaches, guides and supervises the junior nurse. Matthews (1975) reported that nurses enjoyed working in pairs. This system can be compatible with the use of NP.

Patient allocation

This can be defined as a

"system of allocating work in which each nurse is assigned to give complete care to one patient or a group of patients" (Grant, 1979).

This may be for one span of duty or longer. Obviously, the longer a nurse works with a patient, the better he or she is able to assess, plan and evaluate the care. Hunt (1978) considered that patient allocation is essential for NP.

There can be difficulties with patient allocation. It can threaten the authority and autonomy of the sister or charge nurse (CN) and diminish the importance of the trained staff (Cowper Smith, 1978). It increases responsibility and accountability of junior nurses, which may be stressful. Matthews (1975) found that during staff shortages wards practising patient allocation tended to revert to task allocation, which could be relied upon to ensure an adequate level of care.

Primary nursing

Primary nursing is a recent innovation first described by Manthey et al (1970) in the USA and as yet rarely used in Britain. There are two kinds of nursing personnel, primary and associate nurses (Manthey and Kramer, 1970). The primary nurse is usually registered and the system works best when there is a high proportion of qualified staff (Marram et al, 1979). Each primary nurse has a small group of patients for whom he or she is responsible from admission to discharge. The primary nurse is responsible for the total NP with those patients during their stay in hospital and remains accountable for their care over the whole twenty-four hour period. In the absence of the primary nurse, associate nurses are allocated to care for his or her patients, but they report back to the primary nurse who retains ultimate responsibility. A primary nurse may function as associate nurse for some patients, but many associate nurses will not be sufficiently experienced or qualified to act as primary nurses.

This organisational structure leaves the sister or CN free to administer the ward, teach, and be a clinical consultant. The introduction of primary nursing has been described as the most important change in recent years, a return to the concept of "my nurse" and "my patient" (Manthey, 1970). Primary nursing has been described as the vehicle for "the new face of individual accountability" (Hegyvary, 1977).

4.2.4.4 Evaluation

Evaluation of the quality and effectiveness of patient care is important in the development of nursing and relevant to this research. Consequently, section 4.4 of this chapter considers the general topic of evaluation in nursing. This section is specifically concerned with evaluation as the final stage in NP, but material in section 4.4 is also relevant.

Evaluation is a form of reassessment in which actual patient outcomes are compared with expected outcomes. Luker (1979) described a series of stages. Firstly, observable criteria are selected in relation to the desired patient goals, and relevant information about the patient's progress is collected. This information is compared with the selected criteria and judgments are made about the response. Finally, the care plan is modified according to the results of care given and new objectives are set. Failure to achieve the expected objectives calls for a review of each stage of the NP and the effectiveness with which it has been carried out (McFarlane and Castledine, 1982).

Evaluation should be recorded on the patient's progress notes (Hunt, 1978) or on the care plan. A date for the evaluation of any nursing action should have been included in the care plan when care was initiated (Hunt and Marks-Maran, 1980). Evaluation may take place at the daily report session or at patient-centred ward meetings.

As far as possible objective evaluation is preferred. Wilson-Barnett (1981) argued that numerical scales should be used to make evaluation more accurate. Some responses may require subjective evaluation by the patient, for example changes in the intensity of pain (Crow, 1977).

According to Luker (1979), evaluation is a much neglected area of nursing and poorly documented. She noted (Luker, 1981) that most of the literature on NP devotes a disproportionate amount of space to assessment, which may be to the detriment of other components, such as evaluation. McMahon (1973) suggested that a major reason for this neglect is the lack of valid and reliable outcome measures. Criterion measures are discussed more fully later in this chapter.

4.2.5 Patient and family participation in NP

Many writers have emphasised that the patient and patient's family should be encouraged to take an active role in the NP at all stages, including decision-making and implementation of care (Yura and Walsh, 1978; Carrieri and Sitzman, 1971). NP was said to "set the patient firmly at the centre of the action" (Hargreaves, 1979) and patient and family participation was described by Long (1981) as "part of the essence of the nursing process". Ashworth (1982) described NP as containing "inherent acceptance of the patient's/client's right to participate in his health care, including decision-making". McFarlane and Castledine (1982) wrote that the philosophy behind NP was that the patient should always be involved as far as possible.

In order to make an active contribution, patients have to know they are being "processed" and be invited to participate (Breckman, 1979). This

includes outlining the stages of NP and asking the patient how much he or she wishes the relatives to be involved.

The amount and quality of patient participation will depend on the patient's physical and mental state. Schaefer (1974) pointed out that freedom, rationality and voluntariness are required to make a decision. Patients must be made aware of all alternatives. Schaefer (1974) and Marriner (1980) pointed out that if nurses saw their role as including patient education, this would supply the patient with a foundation upon which to base rational and informed decisions. Darcy (1980) considered that the nurses' role includes the use of skills aimed at encouraging and motivating patient participation.

4.2.5.1 Assessment

King (1971) wrote that unless the patient's perceptions, goals and other inputs are considered, any plan of care is doomed to failure. Taking the nursing history as a collaborative effort stimulates the patient to become involved which can lead to increased cooperation (Mayers, 1978). Schaeffer (1974) considered that input from the patient is essential to assess his or her present health status and Marriner (1979) described the patient as the single most important source for assessment.

Several writers specifically include subjective validation of problems with the patient as a stage of NP e.g. Carrieri and Sitzman (1971); Luker (1979); and Crow (1979). All recognise that if the patient does not acknowledge a potential or actual problem, then it may be more difficult to deal with. The patient may also participate in suggesting solutions to problems (Crow, 1979). Bedard (1967) observed that when patients' and nurses' perceptions of needs differed, service instructions were not followed and patients' needs, as viewed by the professionals, were not met.

4.3.5.2 Planning

Several writers have suggested that the patient must be a participant in planning and that decisions should not be taken about the patient without his or her involvement or knowledge (Rcn, 1979; Crow et al, 1979). This helps the patient to realize he or she is not just a passive recipient of care.

Yura and Walsh (1978) considered that priorities set by the patient must be considered in establishing the plan. Schaeffer (1974) agreed that determining priorities should be a process of mutual decision-making with the patient.

The goals of the patient and family must also be considered in establishing the plan of care (Dahlin, 1966; Schaefer, 1974). In a study

of patients undergoing rehabilitation after injury Kemp and Vash (1971) found that those who were able to formulate and express goals coped with crisis more effectively. Jasmin and Trygstad (1979) also considered that, except in very rare cases, the nurse and patient should jointly identify problems, share perceptions and ideas, set a goal together and agree to work together towards meeting that goal. If the nurse and patient do not agree on the problem and/or goal Jasmin and Trygstad (1979) believed that the nurse should focus on the patient's view. This humanistic position views the patient as entitled to make his or her own decisions. They believe that success in the attainment of goals involving behaviour change can only occur when all participants desire the change.

The care plan should be developed with the patient and family (Kramer, 1972). According to Lambertson (1964) one of the criteria for high standards of nursing is that the care plan must reflect patient and family participation, depending upon the patient and family's ability. Duberley (1979) and Kramer (1972) advocate keeping the care plan at the bedside, so that the patient might be able to refer to it. This enables the patient to question care and allows him or her to retain some control and independence whilst in hospital.

Nursing team daily planning rounds provide one way for patients to participate in planning their own care (Sharp and Cross, 1971). During these rounds care activities can be reviewed with patients.

4.2.5.3 Implementation

Less has been written on patient and family participation in the implementation of care than on the cognitive components of NP. Tiffany (1979) attacked what he viewed as a paternalistic attitude among nurses and described patients' obvious ability to maintain their own fluid balance charts, diet and pressure area care, provided the nurse had skilfully planned the care needed.

Patients may make a greater contribution to their care if they know which nurse has been allocated to them. Breckman (1979) in her work with stoma patients found that very few knew who their nurse was on a particular day.

4.2.5.4 Evaluation

Although objective evaluation is desirable, there are many aspects of care that can best be evaluated subjectively by the patient (Lewis, 1968). It is necessary to know if the nurse's evaluation corresponds with the patient's evaluation. Breckman (1979) found that few patients were ever asked to evaluate their own care, although the Rcn (1979) argued that the patient and family have a major part to play in evaluation.

4.2.6 Putting the nursing process into practice in Britain

4.2.6.1 Official Reactions to the nursing process

Department of Health and Social Security (DHSS)

The DHSS has sponsored several seminars on the NP, the first of which was held in 1982 and reported by Brooking (1983). Invited participants included regional "link" nurses, holders of designated NP development and advisory posts, and representatives from WHO Participating Centres. Reports of these seminars have been widely distributed and have resulted in the production of a DHSS newsletter called Nursing Process Link. At the first seminar the Deputy Chief Nursing Officer informed participants that the Nursing Division of the DHSS was "interested in and committed to the nursing process" (Brooking, 1983). The DHSS appointed an Advisor/Co-ordinator for the NP in 1979, since when she has advised and guided nurses in all National Health Service (NHS) Regions on the implementation of NP.

Regional Health Authorities

In response to a request in 1979 from the Chief Nursing Officer at the DHSS, many Regions designated a nurse to act as a focal point for NP activity and to liaise between the Region and the DHSS Advisor/Co-ordinator for the NP. Many discussion and support groups were established at Regional and District level. For example, Wessex set up a Regional Nursing Process Users Group in 1981 and held monthly meetings, acting as a forum for collecting and disseminating information. Other Regions developed similar activities. The work of nurses in development posts has been described by Whitfield (1983).

The General Nursing Council for England and Wales (GNC)

In a published statement of educational policy the GNC (1977) recommended that schools of nursing should use the concept of NP to provide a unifying thread for the study of patient care and a helpful framework for nursing practice. The GNC considered that the training for enrollment did not prepare the nurse for planning and evaluating care which depended upon the deeper knowledge provided by training for registration.

At a DHSS seminar in 1982 (Brooking, 1983) the Deputy Chief Nursing Officer said she expected that the United Kingdom Central Council and the National Boards would want to continue NP developments.

The Royal College of Nursing

In 1979 the Rcn convened a working party and published a booklet on implementing the NP (Rcn, 1979). In a discussion document on standards of

nursing care the Rcn described "good" nursing care as:

"planned, systematic and focused care which implies a continuous and dynamic pattern of assessing, planning, action and review"

(Rcn, 1980). A year later the Rcn strongly recommended that future nursing standards depended upon the appropriate use of the NP approach (Rcn, 1981).

The Open University

The Open University produced a course on NP (P.553) entitled "A Systematic Approach to Nursing Care". This was published in 1984 and consists of seven modules for individual and group study.

4.2.6.2 The extent of implementation of nursing process

The large number of articles in the popular nursing press demonstrates an increasing interest among clinical nurses. Recent articles and books have described the use of NP with a wide variety of patient groups: examples include the mentally ill (Schröck, 1980); the mentally handicapped (Leslie and Shiells, 1981); sick children (Lewer and Robertson, 1983); the elderly (Garrett, 1983); and patients nursed at home (Robertson, 1981).

Norton (1981) examined the introduction of NP in one Regional Health Authority and found at least one nucleus of activity in each district. Norton's general impressions were that the term "nursing process" was widely disliked; many clinical nurses saw it as just an elaborate system of documentation; and many thought that patient allocation was the NP. History-taking tended to become a formalised question and answer procedure; nurses had difficulty stating objectives; and evaluation was rare. Law (1981) visited hospitals all over Britain and reported that implementation was much slower than first anticipated. She identified some of the difficulties, which included: lack of information and misunderstanding about the concept; lack of learning opportunities for qualified nurses; excessive reliance on medical diagnosis in planning care; need for support for nurses introducing change; need for greater commitment from nurse managers and teachers; and nurses' complaints that NP was too time-consuming.

Despite the recommendations of the statutory bodies, there is still resistance within the profession to the NP. A number of writers have argued that within nursing there exists a deep-rooted resistance to any change (Clark, 1978; Duberley, 1977; Bendall, 1973; and Scott-Wright, 1969). Ruano (1971) pointed out that innovation is often seen as deviance and is more likely to be punished than rewarded. Abdellah and Levine (1979) considered that there could be a 30 year gap between the development

of nursing knowledge and its application in practice. Clark (1978) suggested that resistance to the NP may be associated with the structure of nursing, the lack of sufficiently educated recruits and the predominance of women in nursing. Long (1981) considered that British scepticism was associated with the expression of NP concepts in American terminology.

In a British study of qualified nurses' attitudes towards NP, Bowman et al (1983) found that sisters/CN's expressed more positive attitudes than enrolled nurses (SEN's) although differences were not statistically significant. Comparing nurses' attitudes in different units, Bowman et al (1983) found that nurses in the unit which had used NP for the longest time and had considerable in-service education expressed significantly more positive attitudes than nurses in two units which had used NP for shorter periods and without formal teaching. This suggests that in-service education may be a powerful determinant of attitudes towards NP.

Conditions necessary to implement NP.

It is necessary to prepare before NP is implemented. Teaching student nurses must be concurrent with educating qualified staff (Crow, 1977). A variety of training techniques can be used - study days, visits, workshops and practice in history-taking and planning. McGilloway (1980) considered that the use of NP requires communication skills, such as skills at interviewing, teaching, discriminating, leadership, writing referrals and collaborating with other professionals. Lee (1980) warned against implementation in stages, as part of an idea is harder to communicate than the whole thing. Darcy (1980) suggested that an administrative style of participative management and team work promote expertise at all levels and are conducive to this method of practice. An individual or committee should co-ordinate the introduction of NP throughout the hospital and wards should share their experiences. Once established, Darcy (1980) recommended that NP should be monitored and evaluated.

4.2.7 Evaluation of the NP.

The continued development of NP requires the demonstration of a clear causal relationship between the use of NP and measurable patient outcomes or quality of care. There are currently few such studies, although the need for this research has been emphasised (Stevens, 1979; Phaneuf, 1980; and Wilson-Barnett, 1981).

Because of the paucity of research which directly evaluates NP, this section examines other related evidence. Firstly, there are anecdotal accounts of the effects of NP based on subjective opinions. Secondly, there are other non-empirical critiques of NP. Next are a group of mainly British studies which examine the effects of changing from task allocation

to patient allocation. This is followed by a section on American studies comparing primary nursing units with functional or team nursing units. The relationship between methods of ward organisation, such as patient allocation or primary nursing was discussed in Section 4.2.4.3. It was argued that patient allocation and primary nursing are the two organisational strategies which most facilitate the use of NP. Although not explicit in the studies, it is probable that the primary nursing units discussed possessed many of the characteristics of the NP model of care. Finally, there are a very small number of British studies which have monitored the effects of introducing NP. Each of these types of evidence is discussed in an attempt to develop a picture of the extent to which NP has been evaluated.

4.2.7.1 Anecdotal accounts

Articles in the popular nursing press have outlined attempts to put NP into practice and mostly describe beneficial effects, despite the difficulties of implementation. For example, Gooch (1982) reported that the major difficulties were evaluation and the identification of goals. She reported that student nurses had accepted and benefited from the change. On the basis of liaison with hospitals throughout the country, Law (1981) reported that changes resulting from the introduction of NP included improved nurse-patient and nurse-nurse communication; improved written records; increased patient participation; increased continuity of care, provision of a new framework for education and method of assessing workload; and increased nurses' job satisfaction. Although impressionistic, the consistency of the anecdotal reports is convincing.

4.2.7.2 Non-empirical critiques

The assertion that NP will enhance the professional status of nurses (Lewis, 1968) has attracted critical discussion. McFarlane (1980) described how NP moves nursing from an executive level to a decision and policy-making level about individual care. Accountability and autonomy of nurses are thus increased (Rcn, 1980) which are two of the hallmarks of professional status. In a sociological analysis Dickinson (1982) described how NP appears to enhance professional status. It establishes the centrality of clinical nursing for qualified nurses, by redefining basic care as complex and scientific. It asserts the independence of nursing from medicine, and it re-establishes functional boundaries between trained nurses and auxiliaries, who are largely excluded from care planning. Dickinson (1982) argued that paradoxically evaluation of care may expose the precarious foundations of much nursing knowledge. Furthermore the notion of patient participation, implicit in the NP is the antithesis of professional status. Friedson (1970)

observed that if a professional has to explain and justify his or her action to a lay person, status may be threatened. Similarly, Dickinson (1982) noted that the least prestigious medical specialties are those with a notion of partnership between patient and doctor.

Henderson (1982) criticised the term "the nursing process" on semantic grounds. "The" implies that activities outside the problem-solving steps cannot be legitimate nursing functions. Yet, there are many important nursing activities which are not directly patient-related. The word "nursing" implies that problem-solving is peculiar to nurses, whereas Henderson (1982) argued that NP is an analytical approach which should be used by all health care providers when their intervention is of a problem-solving nature.

Henderson (1982) commented that NP ignores the intuitive aspects of nursing and the role of experience and expertise. Roper et al (1983) countered this by arguing that NP can be used within a conceptual framework which accommodates both scientific and humanistic elements. Another of Henderson's (1982) criticisms is that NP ascribes to nurses an unduly omnipotent role, assuming that nurses can help to solve all problems. This is a concern shared by Altschul (1982).

Another important group of criticisms concern the potential of NP to generate stress. Menzies (1960), in a psycho-analytic study, described how splitting up the nurse-patient relationship, inherent in task allocation, lessened stress experienced by junior nurses and stigma experienced by patients. Altschul (1982) pointed out that NP brings the nurse into closer contact with patients, thus preventing the use of Menzies' (1960) defensive techniques, and increasing anxiety. Pinker (1971) wrote that dependencies of a stigmatising nature are avoided when an individual receives aid of a partial nature from a number of providers. Similarly, Litvak (1965) considered that if a caregiver is never in a position to provide the entire service, the caregiver is never able to demand total subservience.

4.2.7.3 The effects of changing from task allocation to patient allocation

Studies which have examined the effects of changing from task to patient allocation have generally found little effect on measured outcomes. Studies by Auld (1968) in Wales, Boekholdt and Kanter (1978) in Holland and Chavasse (1978) in Ireland found that nurses liked the new system, but patients noticed little change.

Metcalf (1983) also compared a change from task-centred care to patient-centred care in one British maternity ward. She used observation, interviews and questionnaires to examine practice before and after

the change. The majority of nurses liked patient allocation, but there was no increase in job satisfaction. Nurses thought their relationship with patients improved, although there was little increase in the total time nurses interacted with patients. There was little difference to the observed work that nurses did, or to the observed care that patients received. The majority of patients liked the new system but there was no increase in overall patient satisfaction. Metcalf (1983) concluded that her study provided little evidence to support the reputed advantages of patient allocation over task allocation.

4.2.7.4 American studies comparing primary nursing with functional nursing

Most of these studies have used nurses' job satisfaction, patient satisfaction or quality of care as dependent variables. The studies are not really comparable as they have used widely differing designs and measures.

Several studies have found increased nursing staff satisfaction on primary nursing units (Manthey, 1970; Marram, 1973; Theis and Harrington, 1968). Collins (1977) and Carey (1979) interviewed primary and team nurses and found primary nurses were more satisfied with their jobs. Corn et al (1977) interviewed nurses before and after initiating primary nursing and reported that nurses preferred the new approach. However, conflicting findings have been reported. Steckel et al (1980) found no differences in nurses' satisfaction between units in which primary, functional and total nursing care were practised. Young et al (1980) claimed significantly increased job satisfaction among nurses on a team nursing unit.

The weight of evidence suggests that job satisfaction is higher in primary nursing units. However, these studies do not control for differences in staff enthusiasm, motivation, professional dedication, education etc. between the units. It is possible that nurses working on primary units chose to go there because their job satisfaction and commitment to nursing was higher anyway.

Another dependent variable which has been examined in many studies is patient satisfaction with care and there seems little evidence that this is increased in primary nursing units. Many studies have found no significant differences in patient satisfaction between primary and team nursing units (Ventura et al, 1982; Collins, 1977; Young et al, 1980; Steckel et al, 1980; and Carey, 1979). Marram et al (1976) found significant differences on questionnaire items concerning individualisation of care. Recipients of primary nursing reported that nurses discussed with them their illnesses in a more individualised way and co-ordinated information with other staff. McCarthy and Schifalacqua (1978) found that patients on a primary nursing unit gave more positive responses overall; however this study is of

doubtful validity due to only a 28% response rate. Daeffler (1975) found (non-significant) higher levels of satisfaction and (non-significant) fewer perceived omissions in care reported by patients in a primary nursing unit.

In a well-controlled study using Volicer's Hospital Stress Rating Scale (Volicer and Bohannon, 1975), Hegedus (1979) found that patients in a primary nursing unit experienced significantly less stress than those in a functional delivery system.

Thirdly, there are a group of studies which used quality of care as their outcome measure (Steckel et al, 1980; Haussman et al, 1976; and Collins, 1977). Different criteria of quality of care have been identified by the various researchers, thus making the studies incomparable. Marram et al (1976) compared nursing documentation and found that the forms used on the primary nursing unit more often contained information about patients' perceptions of hospitalization, used more descriptive terms in identifying the general appearance of the patient and identified more nursing needs than did the forms on the team nursing unit.

Williams (1975) compared primary and team nursing in a children's hospital. The nurses' performance was rated using the Slater scale (Wandelt and Stewart, 1975). The quality of care received by the patients was rated using the Quality of Patient Care Scale (Wandelt and Ager, 1974) and the Nursing Audit (Phaneuf, 1976). The mean scores for all three measures were significantly higher in the primary nursing unit. In a similar study Felton (1975) found increased scores on the Slater Scale of Nursing Competencies and the Quality of Patient Care Scale in a primary nursing unit compared with a team nursing unit. Felton (1975) also found that nurses in the primary nursing unit had substantially higher educational qualifications than nurses in the team nursing unit. As neither Felton (1975) nor Williams (1975) controlled for nurse competencies or education this raises the question of whether the increased quality of care was a function of differences between the nurses, rather than structural differences.

Hamera and O'Connell (1981) collected data in a unit before and after the transition from team nursing to primary nursing. They found that many patients did not appear to be receiving primary nursing, so they were removed from the analysis. The adjusted data indicated that the quantity of nurse-patient interaction remained the same, but nurturant interactions and patient involvement increased with the introduction of primary nursing. This was one of the very few studies which checked that primary nursing was actually occurring. There is a problem of lack of control and a Hawthorne

effect in a before and after design, especially as this unit was selected because staff wanted to change to primary nursing.

The major inadequacy of the studies cited is their failure to control for the other variables which could account for differences between primary and team nursing units. These variables could include:

- improved competencies of nurses due to selective recruitment, in-service training, increased motivation, higher qualifications, etc.
- improved clinical and organisational support for primary units; and
- primary nursing may incorporate innovations other than the obvious structural ones, which are unlikely to occur in team nursing units, e.g. increased individual accountability and professionalism, strengthening the nurses' identity, etc.

Organisational theorists have recognised this structure versus people debate. Structuralists e.g. Perrow (1970) considered that structures have the major impact on organisational processes and outcomes. Human relations scientists e.g. Argyris (1962) suggested that it is the technical (clinical) and interpersonal competencies of the people in organisations that have the most impact on organisational effectiveness. They believe that structural forms are supportive mechanisms, secondary to human skills. Contingency theorists, e.g. Thompson (1967) suggested that in social systems where tasks are highly complex, unpredictable and uncertain, such as nursing, competencies play a greater role than organisational structures in the quality of results.

In an attempt to resolve this question, Shukla (1981) carried out a comparative evaluation of a primary and a team nursing unit in which the competency of the nurses was equalised. Nurses received six months of continuing education and staff development programmes and the Slater Scale of Nursing Competencies was administered to check equivalence between the two units. The quality of patient care on the two units was then measured using the Quality of Patient Care Scale. Although the primary nursing unit scored higher on five of the six subscales, only one was significantly higher - the communication sub-scale. This study suggests that a primary nursing structure is as good or better than team nursing in providing high quality care. However, the small differences between the two units suggests that structural superiority may not be as important as previous research had suggested and nursing competencies may be as strong or a stronger contributing factor in determining the quality of care.

4.2.7.5 The effects of nursing process

Very few studies have attempted any global evaluation of NP. Barnett

(1982) evaluated the introduction of care plans in medical and surgical wards. A variety of data collecting methods were used before and after the change. Sisters' management styles appeared to influence the use of written care plans. There were differences between the medical and surgical wards which influenced attitudes towards individualised care. The care plans worked well in medical wards, although mostly physical problems were recorded. The content of the progress notes showed changes once student nurses referred to the written care plans rather than their notebooks. The care plans appeared to help nurses understand why certain nursing actions were prescribed. They were useful for nurses who came to work in the wards for short periods. The introduction of care plans had no significant effects on sickness or absence. This contradicts Bowman et al (1983) who reported reduction in staff turnover (another possible indicator of staff morale) when they introduced NP in a medical unit.

In a small study Corner (1983) compared the use of nursing (midwifery) process and traditional patterns of care in two ante-natal clinics. She confirmed the differences between the two clinics using the Nursing Process Measuring Scale developed by this researcher as part of this study. This additional test of the validity of the scale is discussed in Chapter 12. Corner (1983) measured the extent to which each unit achieved the major aims of ante-natal care. She found that the unit using nursing/midwifery process was more effective in achieving a broader concept of ante-natal care than the medical model allows; meeting the emotional needs of women; and increasing women's satisfaction with their care. There were no differences on the other aims of ante-natal care. The limitation of the study was that there were numerous other uncontrolled (and uncontrollable) differences between the two clinics, which could have been responsible for the findings.

Miller (1982) studied ten geriatric wards, comparing those which had used NP for at least a year with those using different approaches. She determined the use of NP by examining factors such as comprehensiveness of care, decision-making, report giving and writing, accountability, co-ordination, continuity of care, etc. Miller (1982) found that short-stay patients were equally happy in all wards, but long-stay patients were happier in the NP wards. Patients in NP wards engaged in more self-care, were more active inside and outside the ward, and were more likely to have their own property. Fewer patients in the NP wards were incontinent of faeces and there were fewer pressure sores. (Similarly, Bowman et al (1983) found a reduced incidence of pressure sores on a medical unit after introducing the NP). Nurses in NP wards spent more time with the most dependent patients and put more emphasis on self-care. This important

study shows a pattern of higher quality care in the NP wards on a range of indicators. The major limitation of the study is that the NP wards had themselves chosen to use this system of care. Miller (1982) did not control for, or attempt to measure, staff characteristics in the two types of wards. As discussed in the previous section, it could be staff competencies rather than structural differences that influenced the quality of care.

4.2.7.6 Discussion of the evaluation studies

Bringing together the evidence discussed in this section, some tentative conclusions about the effects of NP may be drawn. There is some indication that NP may enhance the general quality of nursing care. Nursing documentation appears to be more comprehensive and identifies more patient needs. There seems to be only a little evidence of increased patient satisfaction, although patients recognise that care is more individualised. The majority of studies suggest that nursing process increases nurses' job satisfaction.

Nevertheless, the central question of whether nursing process makes a difference to the quality of patient care remains largely unanswered. The methodological difficulties of evaluating such a multi-faceted concept as the NP are enormous and this may account for the dearth of serious studies. Most studies reviewed suffer from absence of adequate control over the many extraneous variables which could have influenced the results. The absence of objective indicators of whether or not NP is being used has become apparent and makes doubtful the validity of many of the studies described. There is clearly a need for a series of objective criteria against which the use of NP can be measured. This would be a major step towards valid and reliable evaluation.

4.3 THEORIES OF NURSING

The development of a theoretical base for nursing is still in its infancy and there is much confusion about nursing theories. Theory in nursing is no different from theory in other disciplines except that it "attempts to describe or explain the phenomenon called nursing" (Stevens, 1979). The importance of theory to nursing has been discussed widely, e.g. Rines and Montag (1976); McFarlane, (1977). The Nursing Development Conference Group (1979) asserted that

"nursing's enduring contributions to society are in part dependent upon the formalization and validation of theoretical and practical knowledge to guide nurses' actions"

This section begins with a discussion of theories in nursing, classifying the range and levels of theories. Orem's self-care concept has been chosen as the nursing theory most relevant to this study and her work is examined

and analysed using a framework developed by Dickoff et al (1968). Hall's theory is also briefly mentioned as relevant to patient participation in care. The penultimate section contains a critical evaluation of nursing theory. Finally, the relevance of nursing theory to the present study is considered.

4.3.1 Levels of nursing theories

Nursing theories may be classified into descriptive, explanatory and prescriptive (Stevens, 1979). Descriptive theory is the first level of theory development. At its simplest it identifies the major elements in a phenomenon. The next level of complexity is to describe the relationships among the elements. In Dickoff and James' (1968) classification of nursing theories, descriptive theory is sub-divided into naming and correlating levels of theory. The next level is explanatory theory which examines how or why the constituents of the theory relate to and with each other. Each level presupposes the lower levels.

To this classification Dickoff and James (1968) added a fourth level, prescriptive or situation-producing theory. They contend that nursing theory should be prescriptive because its purpose is to bring about desired changes in practice. Whereas the basic scientist looks to theory for definition, explanation and prediction, the professional in a practice discipline requires theory to guide actions. Dickoff and James (1968, 1975) emphasised that the impetus for theory development should come from practice, and having been refined in research, theory must be returned to practice, if it is to be more than speculation.

Not all nursing theorists share this view. For example Beckstrand (1978) argued that Dickoff and James' (1968) conception of practice theory is roughly equivalent to a plan of action and is little more than examples of established forms of knowledge.

4.3.2 Range of nursing theories

It is necessary to distinguish between global, middle-range and small-scale theories in nursing. Early American theories developed in the 1960's and 1970's were large-scale and attempted to encompass the whole domain of nursing. Examples of the most influential included Johnson (1961); King (1971); Orlando (1961); Peplau (1969); Rogers (1970) and Roy (1976). The work of Hall (1966) and Orem (1971) is discussed separately. Global theories have shifted the focus of nursing from disease to activities of daily living and individuals' needs in illness (Crow, 1982; McFarlane, 1977). Global theories are also useful in creating boundaries for nursing and shared viewpoints for nurses in diverse settings (Stevens, 1979).

No other discipline has been able to specify one unifying theory and it is unlikely that nursing will be able to do so. Hardy (1978) argued that a single theory describing nursing's scope and nature would necessarily deal with concepts so general that the relationships among them would remain vague and untestable. The wide range of conceptualisation in nursing theories reflects the diversity of the subject matter. As Craig (1980) observed:

"approaches to nursing theory development are spread over a theory-practice continuum ... the very existence of this continuum signifies nursing's problem in deciphering the nature of the relationship between nursing theory and practice".

Middle-range theories concern a particular nursing specialty, such as community psychiatric nursing. Small-scale theories deal with specific care problems such as pain or insomnia. As a result of smaller range theory development a variety of concepts relating to individuals' responses to illness have emerged (Crow, 1982). The current tendency in theory development is to focus on more limited phenomena (Lenz, 1982). The more specific a theory is the greater its utility within its narrow subject area. Equally as specificity increases, so the applicability of a theory to the total field of nursing decreases (Stevens, 1979). It has been suggested that multiple small-scale theories will eventually be coalesced into a single cumulative theory. However combining theories may be impossible (Stevens, 1979; McFarlane, 1977) because each has its own terms, principles and methods.

4.3.3 Orem's General Theory of Nursing

Orem's theory was first elucidated in 1958 and since then her ideas have been further refined and developed (Orem, 1971; 1973; 1978; 1980). Her ideas have also been expressed in the publications of the Nursing Development Conference Group (1973; 1979), which worked broadly within Orem's conceptual framework. The description that follows is mainly based on Orem (1971), but also draws on more recent work (Orem, 1980).

4.3.3.1 Core concepts

Orem (1971) considered that humans have an innate ability and obligation to look after their own well-being. Self-care is "the practice of activities that individuals personally initiate and perform on their own behalf in maintaining life, health and well-being" (Orem, 1971). The "Universal self care demand" are those requirements that all humans have in common to meet basic human needs. These are very similar to Henderson's (1969) fourteen basic human needs "Health deviation self care" is concerned with needs arising from illness, injury, life cycle event such as pregnancy, or treatment for any of the above.

"Self-care agency" refers to the knowledge, power and ability of people to meet their own self-care demands. "Self-care conduct" is learned through inter-personal relations, and involves decision-making, choices and actions. Orem (1978) considered the following factors to be determinants of self-care agency and hence of needs for nursing: level of maturity, life cycle events, sex, socio-cultural orientation, health state, health care situation, diagnosis, family system, personality, knowledge and psychomotor skills. Kearney and Fleischer (1979) developed an instrument to measure exercise of self-care agency. They found a positive correlation between high degree of self-care agency and self-confidence, self-esteem, achievement, assertion, intelligence, self-control, dependability, helpfulness and adaptability.

4.3.2.2 Framework for analysis of Orem's theory

"Commonplaces" are common topics or "empty pigeonholes" into which each theorist fits something (Stevens, 1979). Analysts of theories tend to produce their own set of commonplaces through which to describe and contrast theories. Dickoff et al (1968) suggested that situation-producing theory should comprise:

- 1) goal content, i.e. the value orientation and aims of the activity;
- 2) prescriptions, i.e. the activities necessary to realise the goal content;
- 3) survey list, i.e. vantage points from which the activity can be viewed:
 - a) agency, i.e. who performs the activity ?
 - b) patiency, i.e. who is the recipient ?
 - c) framework, i.e. in what context is the activity performed ?
 - d) terminus, i.e. what is the end point ?
 - e) procedure, i.e. what is the guiding technique or protocol of the activity ?
 - f) dynamics, i.e. what is the guiding source of the activity ?

These commonplaces will be used to analyse Orem's theory.

1) Goal content

Orem (1971) wrote that:

"nursing practice is the process of one person giving direct help to another, when that person is wholly or partly unable to help himself in the accomplishment of his own daily health related care"

The Nursing Development Conference Group (1973) added that nursing seeks:

"to achieve patient health and health related goals through self-care which is therapeutic; and to overcome self-care deficits; and to foster and preserve the self-care capabilities of the patient"

2) Prescriptions

One or more of five general methods of giving assistance are employed by the nurse. These are: acting for or doing for another; guiding; supporting; teaching; and providing an environment to promote development in relation to becoming able to meet demands for action.

Determination of the type of assistance needed is based upon the type of nursing system required. Orem (1971) described three nursing systems representing variations in the roles of patient and nurse:

- wholly compensatory system, in which the nurse assists by acting or doing for the patient;
- partly compensatory system, in which all five methods of giving assistance are used; and
- supportive-educative system, in which all methods of assistance, except acting or doing for the patient are used.

3) Survey list:

a) Agency

In a wholly compensatory system the nurse is the primary agent. In a partly compensatory system nurse and patient are both agents. In a supportive-educative system, the patient assumes primary agency and the nurse supports the role. Since the goal is directed towards the patient's achievement of optimal self-care agency, the patient is continually encouraged to assume as much as possible the role of agent.

b) Patency

The condition which validates the existence of a requirement for nursing is an inability to initiate or maintain the amount and quality of self-care which is therapeutic in sustaining life and health, in recovering from disease or injury, or in coping with their effects.

c) Framework

Orem does not impose any limitations on the setting in which this activity can be performed.

d) Terminus

Orem measures the effectiveness of nursing according to the degree to which it accomplishes or promotes the patient's self-care. The terminus of nursing care is the point at which the patient achieves the optimum level of self-care agency that can be attained through nursing assistance, or can meet his or her self-care demands without nursing assistance.

e) Procedure

Orem (1980) wrote that the:

"nursing process has its base in the theory that action to accomplish defined and limited goals must be designed and planned in relation to the goals sought, must consider the environmental, technological and human factors relevant to goal accomplishment; must be performed

according to the design, making adjustments as indicated by changing conditions; and must be controlled by evidence that the goal is being achieved".

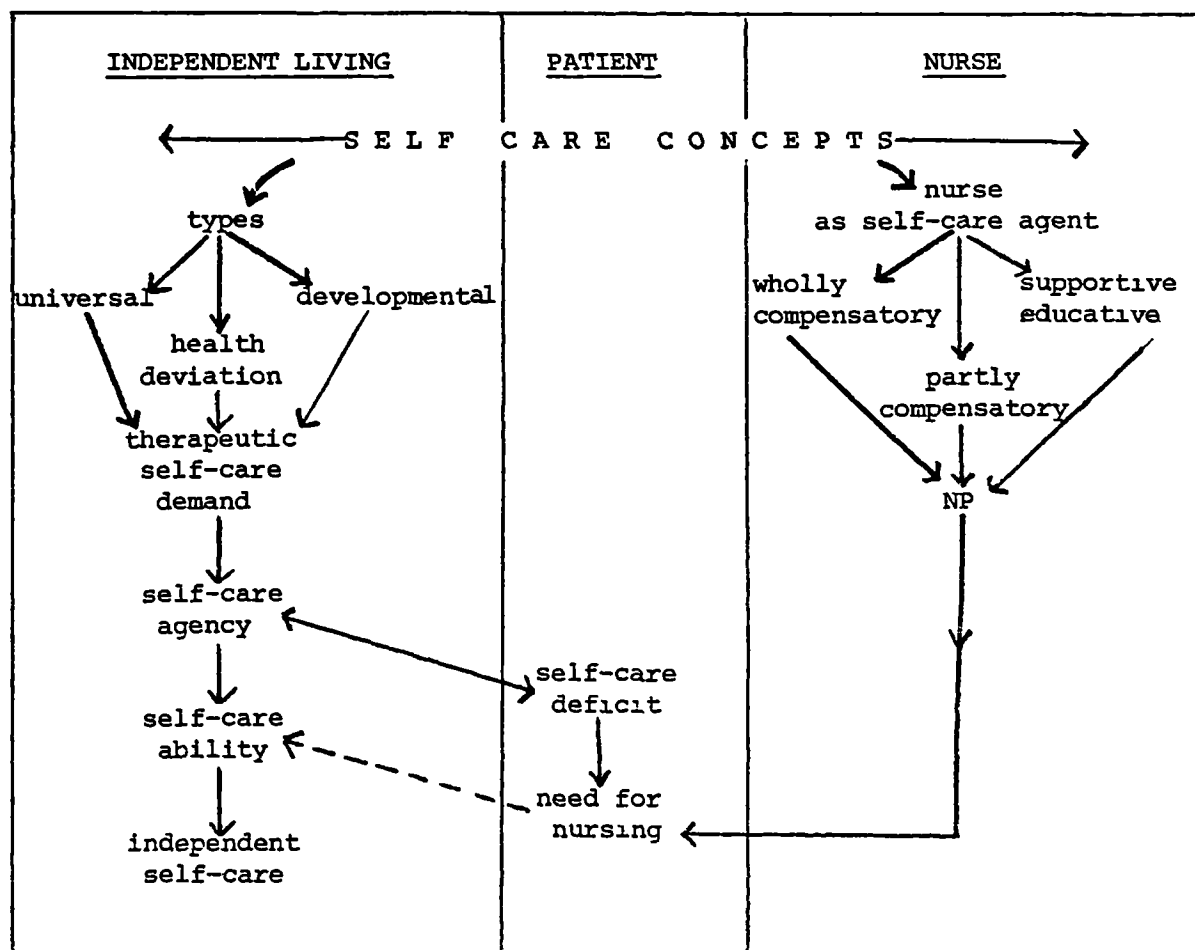
Orem (1971) identified three steps of the nursing process which were summarised by the Nursing Development Conference Group (1973) as :

- determination of why a person requires nursing care;
- designing a system of nursing assistance with therapeutic self-care and assisting components, and planning for the delivery of nursing according to the designed system; and
- initiating, conducting and controlling assisting actions to achieve nursing results that are related to the identified therapeutic self-care requirements and self-care limitations and abilities.

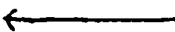
f) Dynamics

Orem recognised that patients and their families may or may not be interested in, or physically or psychologically able to collaborate with nurses to become active participants. The nurse acts in part as a facilitator to the patient's decision-making process. The nurse should consider the personality characteristics of the patient that will determine his or her activity or passivity, and the nurse should explore patients' concerns that may block active participation in health care.

Fig.4.4 Schematic Summary of Orem's Theory of Nursing



4.3.3.3 Implementation of Orem's theory

The self-care concept is one of the few nursing theories that has been successfully implemented. Anna et al (1978) described implementation by graduate students in a nursing home in America. Stroke patients were selected because of the relevance of self-care to stroke rehabilitation. The idea of self-care as increased involvement in decision-making was received unenthusiastically by the patients, thus illustrating a  discrepancy between patients' and nurses' role expectations. Nevertheless Anna et al (1978) reported that :

"the nurses developed a greater respect for the patient, the patient realised his right of choice as a consumer of health care and participated in care geared to re-establish his self-sufficiency"

Several papers have appeared as guides to the practising nurse in using the concept both in general nursing (Joseph, 1980) and in specific areas such as hospice care (Walborn, 1980) and medical-surgical units (Mullin, 1980). Implementation of Orem's theory can be constrained by aspects of the hospital system described by Mullin (1980) as focus on the illness, not individuals; care given is identified by type of task rather than needs of the individual; the system sets priorities for tasks; and the system misperceives the nurses' role.

4.3.3.4 Criticisms of Orem's theory

The criticisms of extant nursing theories outlined in section 4.3.5 on the evaluation of nursing theory are all applicable to Orem's theory. A full exposition of the theory (Orem, 1980) contains no discussion about empirical testing, nor any explanation of the philosophical, historical or scientific derivation or development of the theory. No objective evidence is given that patients or nurses benefit from the system. The writing is difficult to understand, with unfamiliar vocabulary and complex grammatical constructions.

In general Orem's multiple use of terms to classify self-care, e.g. therapeutic, practical, universal and health deviation, may be confusing. Confusion may also result from the unclear definitions of other central concepts. For example, the concept of "system" as used in Orem's nursing systems is never completely defined and is used differently from the term in general systems theory or in body systems.

Orem seems to dichotomise nursing into intellectual and practical phases, with the implication that these are separate and distinct functions. This seems to be unfounded. Finally, she seems to focus on the physical aspects of care with less emphasis on psycho-social care.

4.3.4 Hall's theory of nursing

Another theory which is relevant to patient participation in care is the work of Hall (1966). However, caution is indicated as Stevens (1979) warned that phrases like "the patient is a full fledged participant in determining his plan of care" may be meaningless slogans that have no real place in the theory.

Like Orem (1971), Hall's (1966) view of nursing fulfils Dickoff and James (1968) criteria for situation-producing theory. Hall's ideas developed from her clinical experience as Director of the Loeb Center for Nursing and Rehabilitation at the Montefiori Hospital in New York, where she worked with post-acute rehabilitation patients. In this theory patients are characterised by their lack of full self-awareness and self-control. Health occurs when individuals optimally master self and consciously control their own behaviours. In Hall's theory, the ultimate nursing act is that of inviting the patient to see him or herself and choose (and thereby control) his or her own behaviour. In rehabilitation the patient shifts from a passive to an active role in which learning is involved, and the nurse has the opportunity to teach because of her continuing presence for personal care.

It can be seen from this much simplified summary that the theory is primarily applicable to long-term illness and therefore narrower in range than Orem's theory.

Hall's work illustrates a paradox of patient participation and control. The nurse invites the patient to self-mastery. The patient is active in the sense that he or she can choose to master self or can reject the invitation (education). Nevertheless the nurse will extend the invitation, whether or not desired. In this sense, the nurse is manipulative and the patient passive and captive by virtue of dependency on the nurse for physical care.

4.3.5 Evaluation of nursing theory

Various writers have suggested criteria against which theories may be judged. Schrag (1967) considered that theories should be evaluated in terms of logical adequacy, abstractness, testability, empirical adequacy and pragmatic adequacy. Hardy (1974) argued that an investigator should examine underlying assumptions, validity of concepts, degree of generality, soundness of reasoning, testability of hypotheses, empirical support, ability to control and manipulate the phenomenon and the extent to which the theory predicts events.

In order to be scientifically testable, theories must have operationally

defined concepts and must be capable of being exposed to attempts at falsification (Popper, 1959). With a few exceptions (eg. Frasure-Smith et al, 1980) there is little evidence that nursing theories have been scientifically tested. Crow (1982) argued that they can thus only be said to represent speculations or conjectures.

The pragmatic adequacy of a theory is concerned with the extent to which it can be used in practice to control events, predict outcomes and change conditions (Hardy, 1974). Nursing theory has rarely found its way into practice. Most practising nurses have never heard of nursing theory or regard it as too academic or irrelevant to their work (Lenz, 1982). There may be several reasons for this. Firstly, theorists have failed to produce work written in a form that is accessible to average practising nurses. Nurse educators have failed to incorporate nursing theory into the basic curriculum, except on degree level courses. Thirdly, few theorists specify how their concepts may be applied in practice.

Stevens (1979) argued that there is an ethos in nursing which inhibits the continuing development of extant theories. There is an ethos of non-critical acceptance of the work of others which prevents criticism or modification of another theorist's ideas.

A further criticism is concerned with the locus of the subject matter. Stevens (1979) pointed out that nursing theory is usually located in a mental construct of "ought to be", that is nursing is seen as an idealised construct which may bear little or no relation to the real world of nursing. Theory in both the physical and social sciences is more usually located in the extant area of real events and attempts to be value-free.

Another serious weakness of many nursing theories is the lack of logical development. Basic assumptions are not usually stated, central terms are used loosely and there is a lack of logic and rigour in arguments. No recognition is given to the events leading to the development of the ideas, which seem to have emerged from personal subjective opinion.

4.3.6 Relevance of nursing theory to the present study

The theories of Hall and Orem are both relevant to this study as they concern self-care, patient participation in care and patient control over care. Hall's work is mainly concerned with rehabilitation nursing and may not therefore be applicable to nursing in acute medical and surgical wards. Orem's theory, although broader in scope and more fully developed, fails to stand up to examination against the criteria used to evaluate a nursing theory. In particular the logical, empirical and pragmatic adequacies of the theory have not been convincingly demonstrated.

Although nursing theory is now recognised as important in nursing research, it is premature to use Orem's theory as the conceptual framework for the nursing aspects of this study. Orem's theory is more relevant to this work than other nursing theories, and has been influential in guiding the collection and interpretation of data, but the study must derive its theoretical base from a multi-disciplinary range of relevant theory, discussed in other sections of this literature review.

4.4 EVALUATION OF NURSING

According to Luker (1982) evaluation is a much misunderstood concept, often used interchangeably with assessment, appraisal and judgment. The goal attainment approach (Suchman, 1967) stems from a conceptualisation of evaluation as measurement of the success or failure of an activity in so far as it reaches pre-determined objectives. The failure of nursing to formulate agreed goals reflects a key problem in defining criteria against which to evaluate the effects of care (Abdellah, 1977).

Evaluation research aims to study the application of existing knowledge (Luker, 1982). The evaluation component of the NP (see Section 4.2.4.4) cannot be said to constitute evaluation research because it is subsidiary to the primary goal of giving care (Luker, 1981) and is an everyday part of the care delivery system. Bloch (1980) argued that the closer NP evaluation comes to the vigorous and scientific qualities of evaluation research, the more valid judgments would be. Similarly, Luker (1981) considered that NP provides a framework for the collection of data which can be used retrospectively for evaluation research.

4.4.1 Structure-process-outcome model

The structure-process-outcome model of medical care evaluation was developed by Donabedian (1966, 1969) who saw these three dimensions of practice as links in a chain, each of which could be examined. Structure refers to aspects of the system such as staffing patterns, physical environment and equipment. Purely structural evaluation assumes that if these features reach a specified standard, care will be good. Process refers to the actual giving of care, such as how care is planned and implemented. Purely process evaluation assumes that if care is given to predetermined guidelines, then the patient will benefit. Outcome describes the results of care in terms of changes in the recipient.

More recent writers have recognised that it is insufficient to base quality assessments on only one of the three, and that all three should be examined showing relationships among them (Donabedian, 1975; Inman, 1975; Phaneuf, 1976). Bloch (1975) advocated process-outcome evaluation in which

outcome is related to the process which brought it about. A review of research on quality assurance programmes in long-term care (Kurowski and Breed, 1980) concluded that the relationships between structure and process, and between process and outcome are not well established; that structural criteria alone are least likely to measure quality; that the measurement of outcome is the ultimate validation of effectiveness of the care process; but that it is difficult to specify appropriate outcomes and to relate them to the process of care; and that comparisons of outcomes should take into account individual differences among patients.

4.4.2 Characteristics of criterion measures in evaluation

The term criterion measure has been defined as a "quantitative or qualitative measure against which something is judged or compared" (Crow, 1980) and "the behavioural goal by which progress is judged" (Abdellah, 1977). Criteria for evaluation should be valid, reliable, precise, discrete, measurable, readily understood and relevant (Wilson-Barnett, 1981); comprehensive and generalisable (Bergman, 1980); and sensitive and meaningful (Abdellah, 1977).

Criterion measures for nursing need to be developed in order that the quality of care may be examined (Bower, 1977; Van Maanen, 1981; Yura and Walsh, 1978). Indeed, the American Nurses' Association (1975, 1976) argued that this should be a major priority in nursing research.

Assessment of quality must rest on conceptual and operational definitions agreed upon by nurses; definitions which are elusive and difficult to describe operationally. The variables that make up quality care are many and inter-related and the patient occupies a constantly moving position on the health-illness continuum (Laurin, 1980). Many health disciplines are involved in care and it is difficult to distinguish their separate contributions. Criterion measures also assume that quality can be measured using quantitative indices, which has been disputed (Crow, 1984).

4.4.3 Quality of care measures

Various tools for measuring the quality of care exist, which vary in their definitions of quality, methods of data collection, conceptual framework and level of specificity. In this section a few widely used instruments will be discussed.

4.4.3.1 Assessment of the process of care

These instruments are based on lists of criteria evaluated from observations, reports or records of practice (Padilla and Grant, 1982). The Nursing Audit (Phaneuf, 1966, 1972, 1976) consists of a list of criteria of what nurses should do and an observer judges each item by a retrospective

analysis of the patient's records. However, patients' records may not reflect care actually given (Openshaw, 1984). The Slater Nursing Competencies Scale (Slater, 1967; Wandelt and Stewart, 1975) is an 84 item scale designed to measure the competence of a single nurse in providing patient care. It requires a two and a half hour observation period and is used for personnel evaluation. The Quality Patient Care Scale or Qual Pacs (Wandelt and Ager, 1974) measures how well the care received by patients meets their needs. It was derived from a rewording of the Slater scale to describe care as received by the patient, rather than care as performed. It requires two hours of direct observation as well as chart reviews. The Rush-Medicus NP instrument (Hegyvary and Haussman, 1976), is a method for monitoring the quality of care which focuses on the stages of the NP and the actual delivery of care.

In a study by Ventura et al (1982), the Qual Pacs and the Rush-Medicus instruments were compared. There were no significant correlations between scores derived from the two instruments and the researchers concluded that they were each measuring different dimensions, thus emphasising the complexity of the notion of quality of care. Although many of these instruments report reasonable reliability levels, Kerr and Giovanetti (1984) argued that all the process instruments need further validity testing.

One example of a process instrument developed in Britain is the peer quality assurance audit designed to test whether care is planned using a systematic individualised approach (Mackie and Welch, 1982). Five very generally worded standards are described, which are broad statements outlining the level of practice expected. Several more detailed criteria are specified for each standard, but many of these are not readily measurable e.g. "appropriate personnel are kept informed of the patient's health status: for example, the physician, the paramedical staff"

All the instruments described assume that if care given is judged to be of a high quality, this must be linked with satisfactory patient outcomes, but there is little evidence of such a link. These global measures also assume that the specific care which make up the elements of the subscales are necessarily effective, yet there is little research evidence of this.

4.4.3.2 Assessment of the outcome of care

These are usually based on lists of explicit outcomes or summary scores identifying physical or psychosocial status at one or more points on the health-illness continuum. They are obtained from observations, reports or patients' records (Padilla and Grant, 1982).

These instruments may measure dimensions on one outcome construct such

stress experienced by hospital patients (Volicer, 1973, 1977); patient satisfaction (Wriglesworth and Williams, 1975); or subjective aspects of pain (Reading et al, 1978). Horn and Swain (1977) developed a list of several hundred outcome criteria based on Orem's (1971) self-care theory of nursing.

4.4.3.3 Assessment of structure, process and outcome

These measures have been based on expectations regarding the relationship between criteria sets and their relevance as indicators of quality of care. Conceptual frameworks have been used to describe the inter-relationships between structure, process and/or outcome variables (Padilla and Grant, 1982). A series of studies discussed by Nelson (1978) focussed on the development of outcome measures which were subsequently used to evaluate process-outcome relationships. These studies revealed significant information about the value of the criteria and future directions for process outcome research.

Studies examining the effects of primary nursing versus functional nursing on both processes and outcomes (reviewed in Section 4.2.7.4) are examples of studies assessing the influence of structure on process and/or outcome. Hinshaw (1978) found that structural factors such as staffing ratio and job satisfaction were related to process factors such as nurse delivery of comfort measures and outcome factors of patient satisfaction.

4.4.3.4 Level of specificity of quality of care measures

The measurement of the effectiveness of nursing can, according to Openshaw (1984), be conducted at three different levels of specificity that offer different levels of explanation. The first level is measuring the effectiveness of specific nursing actions or treatments, about which little is known. The second level is measuring the effectiveness of planned total care for a particular patient. This assumes knowledge of the effectiveness of the first level treatments. Most of the instruments described in Section 4.5.4 and its sub-sections are at the second level of specificity. The third level is most general and measures the effectiveness of the total nursing service, whether at ward, hospital or international level. For this to be useful, the more specific knowledge is essential. Openshaw's (1984) classification has clear implications for the development of research, in that research should begin from the most specific level and only when that knowledge is available, proceed to the less specific levels.

4.4.4. Relevance to the present study

The theme of evaluating nursing is relevant to both empirical parts of the study. Judgments about the quality of practice are implicit in the

survey of patient and family participation. The survey is partly a method of studying the practical applications of existing theoretical knowledge about patient and family participation.

The development of the nursing process measuring scale is a contribution towards techniques of quality assessment in nursing. Within the structure-process-outcome model of evaluation, the nursing process scale measures process. Without subsequent research on outcomes associated with different scores on the scale, judgments about the effectiveness of care should not be made. However, outcome measures alone without this sort of measure of process are of little value, as outcomes should be linked back to processes which brought them about.

4.5 DISCUSSION OF THE LITERATURE REVIEW

This discussion summarises the literature review. The main trends and themes are identified, issues central to the study are underlined, and omissions and contradictions are considered. The inclusion of references is deliberately avoided in the summary. The material is integrated into a conceptual framework for this research and is represented diagrammatically. The final section considers how the study fills some of the gaps in the literature and leads into the empirical work.

4.5.1 Summary of Chapter 2.

Psychological and sociological concepts relevant to patient and family participation in care were reviewed.

The psychology of personal control was discussed. There is an impressive body of research which shows that control over aversive events, and to a lesser extent over positive events, reduces stress, is preferred by subjects and has other beneficial effects. It was shown that choice, self administration of aversive stimuli, information and prediction are all aspects of control.

This research is relevant to patient participation because there is evidence that being ill and in hospital is seen by patients as stressful and unpleasant. Most of the studies reviewed were laboratory studies, so their applicability to clinical settings is unknown.

In most experiments control was easy to exercise. There is evidence that control that is difficult to exercise may not reduce stress and is likely to be relinquished by subjects. Patient control over care in hospital may be seen by patients as difficult to exercise, but this has not been tested.

Personality variables and coping styles which are theoretically likely

to interact with control include locus of control, self-efficacy, reactance, helplessness, etc. Relevant demographic variables may include age, sex, education, social class, etc. Most laboratory studies did not address individual differences and used undergraduates as subjects, which may have distorted the results. The relationships between the exercise of control, demographic variables and personality factors have not yet been elucidated, although predictions are possible.

The traditional sociological conception of the sick role sees the patient as passive and the carer as powerful and controlling. There is evidence that patients recognise that passivity is expected of them and are rewarded for conformity by being seen as "good" patients. It seems that junior nurses prefer passive patients more than senior nurses do. Evidence from patient satisfaction surveys shows that lack of information is patients' main complaint.

Variations in patients' attitudes and behaviour were described according to age, sex, social class and cultural background.

The role of the family in Western societies is passive once the patient is within the control of the health professionals. Families of hospital patients experience much distress, but nurses have minimal contact with them. Family stress may be reduced by involvement in care.

Chapter 2 provided a general theoretical background to the study. The traditional roles of patient and patient's family have been shown to be passive, despite considerable psychological justification for increasing patient and family control over care.

4.5.2 Summary of Chapter 3.

This chapter reviewed the literature on consumerism in health care, an important part of which is patient and family participation or involvement in care during illness.

It was argued that traditional medical practice is based on a deterministic view of the nature of humans. The moves towards patient participation, control and self-care have their philosophical antecedents in the opposing view that humans have free will and self-determination.

The widespread commitment, both nationally and internationally to democracy, personal autonomy and human rights justify taking these notions seriously in health care. This is supported by various nursing codes of ethics and patients' bills of rights. Nevertheless, much medical practice is based on paternalism, which is incompatible with personal autonomy.

The increasing influence of the health care professions over every aspect of life is becoming recognised as a potentially dangerous form of

social control. This is one of the many factors which has precipitated consumerism in health care.

Consumer participation in many areas of life was shown to be influential in modern society. Consumerism in health care was described as part of the democratic approach to health policy. It exists at various levels: individual and community; in sickness and in health; and as both a radical alternative and as an adjunct to professional care. Reasons for the recent development of interest in self-care include changes in society and in the health care professions.

It was shown that many factors influence patients' decisions whether or not to participate in care during illness. These include the difficulty of participation; demographic variables, such as social class and education; and personality characteristics such as self-efficacy. It seems to be generally agreed that patients should be given opportunities to participate, congruent with their control beliefs and usual coping styles, but the nature of the relationships have not been elucidated.

Examples of patient and family participation in community and hospital care were discussed. Community developments which were described include community health councils, patient participation groups in general practice and self-help groups. Few of these have been systematically evaluated. Patient participation in hospital care was considered. Relevant studies with psychiatric patients include work on institutionalisation, associated with the absence of control; and therapeutic communities, as an example of a development in psychiatry which promotes patient autonomy. Institutionalisation is also relevant to work with patients with chronic physical illnesses. One study with medical patients indicated the importance of congruent combinations of participation, information and personality, but the relationships among them remain unclear. The patient group with whom most relevant empirical research has been carried out is the elderly. Several important studies were discussed, which generally found that enhanced patient control and participation were associated with positive physical and psycho-social outcomes. With the exception of these American studies carried out by social psychologists with elderly patients, very few empirical studies of patient participation in care were found. There were many descriptive accounts of relevant developments, but little evaluation of their effects.

Research on giving information to patients before surgery or other aversive medical procedures was reviewed because of its relationship to patient participation in treatment. There is convincing evidence that giving patients various types of preparatory information results in better

recovery on a variety of physical and psycho-social measures. Several writers have argued that information provides patients with various types of enhanced control. The few studies which have directly examined the relationship between active patient involvement and the outcomes of surgery or aversive medical procedure have found that involvement enhanced recovery and the effectiveness of procedures.

Aspects of patient education relevant to self-care and participation were considered. Some patient education programmes are specifically intended to enhance self-care, but have not yet been systematically evaluated. Descriptive studies have demonstrated the ability of patients to carry out procedures usually performed by professionals, for example self monitoring of BP by hypertensives resulted in reduced BP and improved medication compliance.

This review of the literature on patient participation in care revealed little systematic research and the lack of a theoretical framework for examining self-care. Although under-researched, the area is well documented with postulates and hypotheses, but they have not been integrated into a global mapping of the determinants and efficacy of self-care behaviour.

Reviewing the literature, it became apparent that conceptual confusion arises because of the lack of widely agreed definitions of terms such as self-care, self-help, patient participation, involvement, control, choice and health care consumerism. In some work these words have been used synonymously, in other work they are assigned slightly different meanings. In this research the various terms are seen as related, but referring to different levels of specificity. Health care consumerism is the broadest term which refers to lay involvement in any aspect of health related policy-making, planning or direct action. Self-care and self-help are used synonymously and are slightly narrower than consumerism. They include lay actions both in health and illness, but refer to direct action for the individual rather than involvement in policy-making. Terms prefixed by the word patient imply the presence of illness or health deficit and imply collaboration with health professionals. Participation and involvement indicate patient activity either in care delivery or planning. Control and choice indicate that the patient may engage in active participation, but has control or choice over the level of involvement he or she wishes to exercise.

The next part of Chapter 3 reviewed work on family participation in patient care and revealed an area with very little research or other literature. There is some evidence that family involvement and positive family attitudes can have beneficial effects on patient outcomes. Several

writers have argued that families should participate in practical care during hospitalisation, because they are expected to continue care after discharge. There is very little research on the extent of family participation, their attitudes to participation or its effects on patient and family well-being. Group meetings are one method of promoting relative participation which has been used in hospitals, but not formally evaluated. The very few empirical studies which were found were mostly carried out in paediatrics and obstetrics and showed positive effects of increased family participation.

The last section of Chapter 3 reviewed literature on attitudes towards patient and family participation in care. Professional attitudes are important because of the power of health care professionals to support or prevent this development. There is much descriptive and prescriptive work in British and American nursing literature describing the need for and benefits of patient and family participation, including a theoretical model of nurse-patient mutual interaction. The literature suggests that some hostility from professionals is inevitable, given the assumptions on which self-care is based. The WHO is strongly supportive of patient self-determination, which is further justification for the development of research in this area.

Little is known about the relationship between staff and patients' attitudes towards participation and the outcomes of this approach. This is partly a function of the shortage of measuring instruments. Several studies of doctors' and nurses' attitudes to factors relevant to patient participation in care were reviewed, which revealed several scales for measuring attitudes and showed various demographic variables, such as high level of education and senior appointment associated with positive attitudes. One instrument designed to measure patients' preferences for involvement in care and information was found, but this was not fully validated. Another instrument was found which measured elderly patients' perceptions of situational control of daily activities.

4.5.3 Summary of Chapter 4.

Chapter 4 was a review of the relevant nursing literature, specifically nursing process, nursing theory and the evaluation of nursing. Nursing was briefly defined as an activity concerned with caring for people's health-related needs.

The first major section of this chapter was a review of the NP, which was defined as a systematic problem-solving approach to patient care involving assessment of needs, planning of care, giving planned care and evaluation of pre-determined goals. General systems theory was identified as a framework

from which the structure of NP was derived and human needs theory was identified as most adequately describing its content. NP originated in the USA from about 1930, but was hardly mentioned in the European literature until the 1970's.

The components of NP were discussed, using the largely American prescriptive literature. Patient assessment which is the determination of patients' needs for nursing consists of data collection, using a systematic assessment form, classification of data, inferring from data and identification of problems. Care planning includes determining priorities, setting goals, selecting nursing actions and writing the care plan. The implementation of nursing work may be organised in several ways. A continuum with task or functional orientation at one end (e.g. task allocation or team nursing) and individualised patient orientation at the opposite end (e.g. primary nursing or patient allocation) was described. It was argued that as the organisation of nursing work moves to the individualised end of the continuum the use of nursing process is facilitated. Evaluation of care is the comparison of actual patient outcomes with predicted outcomes. Less literature was found on evaluation than on the other three stages of NP.

Patient and family participation in NP is advocated in the British and American literature, both generally and at each of the four stages of NP. Literature on the extent of implementation of NP in Britain suggests a resistance to change within nursing, despite official support for the development of NP from government and statutory nursing bodies.

A review of literature on evaluation of NP was an important part of this chapter. Because of the lack of research directly examining the effects of NP on patient outcomes, various types of relevant evidence were examined. Anecdotal accounts were consistent in asserting that NP resulted in improved standards of care. Non-empirical critiques pointed out some important problems associated with the use of NP, such as potentially increased stress on nurses. A few studies examined the effects of changing from task allocation to patient allocation. A series of American studies compared primary nursing with team or functional nursing, using nurses' job satisfaction, patient satisfaction and/or quality of care as dependent variables. Although an important source of evidence, most of the primary nursing evaluation studies failed to control for other variables which could account for differences between the two systems of nursing work organisation.

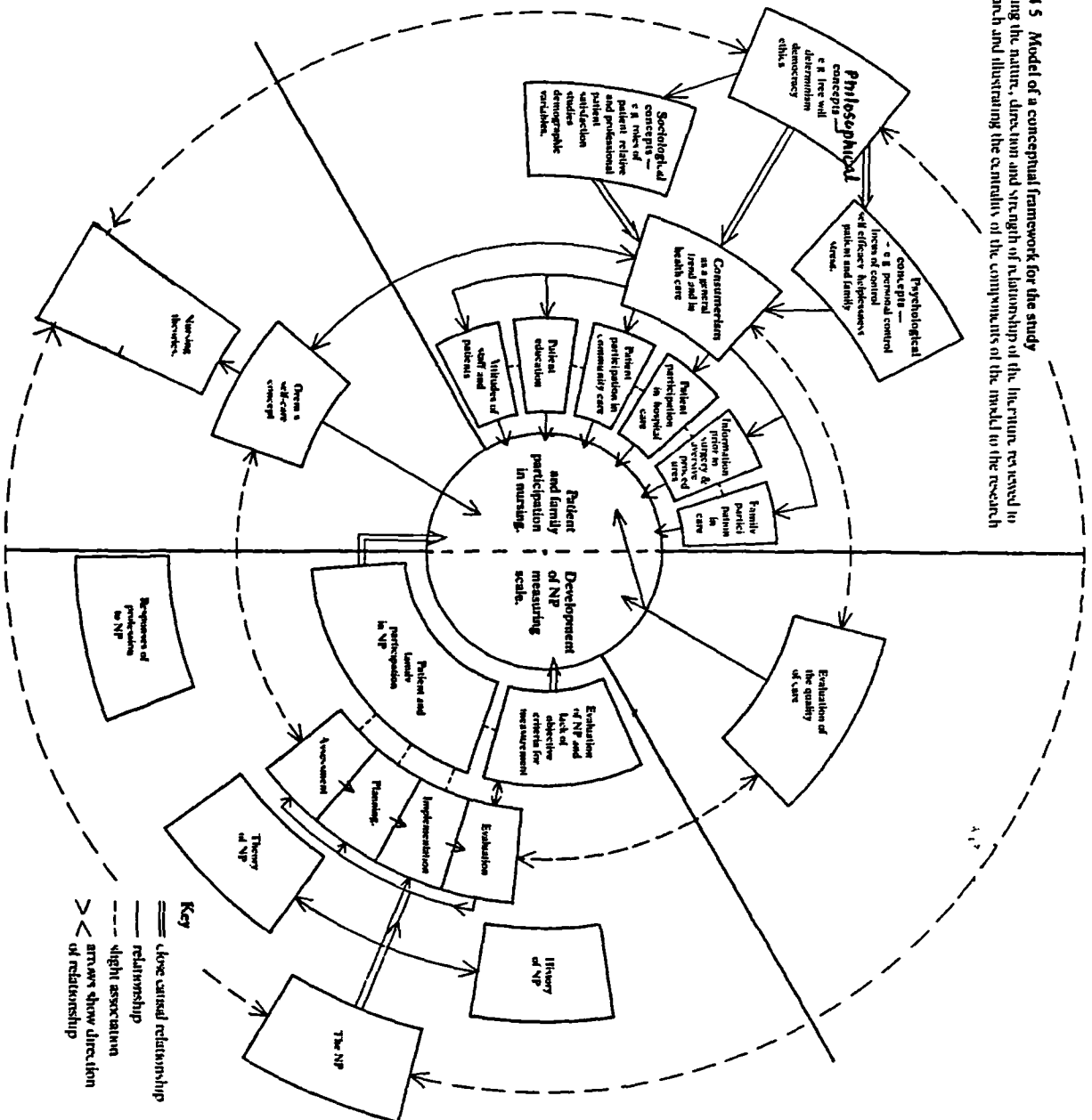
Considered together, the various sources of evidence on the evaluation of the NP indicate that NP may have some beneficial effects overall. Nursing

documentation appears to be more comprehensive. Nurses' job satisfaction seems to be improved, but there is little evidence of improved patient satisfaction. However, the major question of the effect of nursing process on the quality of care remains largely unanswered. Few empirical studies exist and many are methodologically unsound. All lack objective criteria against which the use of NP can be measured.

The next part of Chapter 4 reviewed nursing theories. Orem's self-care theory was identified as most relevant to this study and was critically discussed. It was important to consider nursing theory in some detail because of the view that nursing research should logically be derived from a theoretical framework in nursing. A series of criteria against which theories could be judged were identified. It was argued that Orem's work could be criticised because of its lack of empirical support, lack of philosophical derivation and logical adequacy, its lack of conceptual clarity and its absence of practical utility. These problems demonstrated that it would be inappropriate to base this research purely on Orem's self-care concept and that this study needed to derive its theoretical base from a multi-disciplinary framework.

The final part of Chapter 4 reviewed literature concerned with evaluating the quality of care. This material was reviewed because the theme of judging quality is implicit throughout the survey of patient and family participation in care, and because the development of the nursing process measuring scale is a contribution towards techniques of quality assessment in nursing. The structure-process-outcome model of evaluation was described and examples given of instruments which measure each of these dimensions separately and in combination. The nature of criterion measures was discussed. Finally, three levels of specificity at which care has been evaluated were outlined. It was argued that without knowledge of the effectiveness of individual nursing actions, measurement of overall quality of care is impossible.

Figure 4.5 (See following page 116a)



4.5.4 How this study fills gaps in the literature

This review of the literature has revealed little research on patient and family participation in hospital care, particularly in relation to nursing assessment, planning, implementation and evaluation.

Methodologically rigorous research on NP is also limited, partly because of the apparent absence of methods of measuring the use of NP in hospital wards. There are many unexplored areas which this study attempted to explore. Some questions examined for the first time in this study were as follows:

- How much do nurses, patients and relatives perceive that patients and relatives currently participate in nursing (assessment, planning, implementation and evaluation) in medical and surgical wards ?
- Are there discrepancies in the perceptions of nurses, patients and relatives about the current levels of patient and family participation ?
- How much do patients and relatives participate in various practical care procedures ? What are nurses' views about the appropriateness of patient and family participation in these procedures ?
- How much would patients and relatives ideally like to participate in care ? Are there discrepancies between their perceptions of actual and ideal levels of participation ?
- What attitudes exist among patients, relatives and nurses towards patient and family participation ? Do these three groups differ in their attitudes ?
- What relationship exists between attitudes towards patient and family participation and current practices ?
- What are the relationships between attitudes and practices concerning patient and family participation and variables such as age, sex, education, social class, cultural background, nurses' seniority, patients' and relatives' anxiety and knowledge of the illness and treatment, etc ?
- How relevant is previous research on patient and family participation to medical and surgical ward patients and their families ?
- What are trainee nurses taught about patient and family participation ?
- What policies towards patient and family participation exist in wards, units and hospitals ?
- What is the relationship between nurses' opinions about NP and their attitudes and practices concerning patient and family participation ?

- What is the relationship between the use of NP in wards and the extent of patient and family participation ?
- How can the use of NP in medical and surgical wards be quantified ?

The methods used to examine these questions¹, about which there appears to be no previous research, are discussed in the next chapter.

PART 1. CHAPTER 5

RESEARCH METHODS USED : AN OVERVIEW

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PART 1. CHAPTER 5

RESEARCH METHODS USED : AN OVERVIEW

5.1 THE RESEARCH METHODS

This study employed two main types of research design. A survey design was used to collect information on patient and family participation in nursing, and a methodological design was used in the development of the NP measuring scale. The research methods used for the survey were mainly self-completion questionnaires, including Likert-type attitude scales, supplemented by some interviews and observations. The methodological part of the study consisted of the development of the scale and testing of its validity, reliability and sensitivity.

This section contains a general introduction, justification and criticism of the main methods used in the study. Reasons for using particular methods are discussed and alternative strategies outlined. Survey design, questionnaires, attitude measurement, interviews, observation and instrument development are discussed.

5.1.1 Survey design

Surveys are suitable to study the effects of social forces occurring in natural settings outside the researcher's control (Seaman and Verhonick, 1982). Therefore a survey was selected as an appropriate method of obtaining comparable data from three subject groups about current practices and attitudes towards patient and family participation in nursing. Because of time constraints a cross-sectional design was chosen in preference to a longitudinal study.

Surveys are particularly useful to describe naturally occurring phenomena, using descriptive statistics; and with large amounts of data, correlational techniques can be used to discover the strength of relationships among variables. It must be remembered, however, that correlation does not permit the researcher to imply causal relationships (Oppenheim, 1966).

An advantage of surveys is that data are gathered from a natural social setting and variables can be examined as they occur in the existing social milieu (Seaman and Verhonick, 1982). Furthermore, in terms of money, time and effort, survey research is the most economical method of collecting data from large numbers of subjects (Kerlinger, 1973).

To increase validity surveys must be planned, pre-tested, conducted and analysed carefully, using appropriate techniques. The techniques and problems of survey design are addressed in a number of texts, which were

consulted throughout the study (e.g. Oppenheim, 1966; Moser and Kalton, 1971). Ability to control variables in surveys is usually very limited. However the results of surveys may be used to generate testable hypotheses for experiments.

Surveys may be seriously affected by subjects' response sets and response styles (Cronbach, 1946). The potential problems of acquiescence (Messick, 1967) social desirability response (Edwards, 1967), deviance (Berg, 1967) and neutral responding were considered at the design stage and safeguards written in from the outset. The details of questionnaire design are discussed later. The researcher needs to be aware of the social psychology of the research situation (Silverman, 1977) as the role of research subject will itself influence the subjects' behaviour in a variety of largely unpredictable directions. Researcher expectancy (Rosenthal and Rosnow, 1969) may also influence subjects' responses, particularly in unstructured interviews. This problem is reduced in questionnaires and highly structured interviews.

Data from surveys may be systematically biased by non-random non-response (Oppenheim, 1966). As Scott (1961) pointed out, even if the response rate is very high, there is still a chance that non-response is systematic in that a particular sub-group happened, managed or chose to evade the survey. In this study the characteristics of non-responders were recorded whenever possible.

A fundamental problem of surveys is that attitudes or opinions expressed by subjects do not necessarily reflect their behaviour in the real world. This problem has long been recognised by psychologists (La Piere, 1934; Wicker, 1969) and more recently by nurses (Fielding, 1980). This obviously reduces the validity of the data and suggests that the use of observation to supplement a survey would increase confidence in the findings. Reviewing a series of nursing research studies, Inman (1975) noted discrepancies between the verbal reports of ward staff and actual ward practices. She argued that observation was probably the only valid method of obtaining data on some aspects of nursing.

5.1.2 Triangulation

Several nursing writers (Smith, 1976; Cox, 1984) have advocated using multiple methods of data collection, originally described by Denzin (1970) as triangulation. Denzin (1970) suggested that methods, types of data and theories utilised could all be triangulated and superimposed on one another to increase confidence in the findings. This method of cross-checking, which is not necessarily a three-pronged approach, helps to overcome the shortcomings inherent in any single

method. As far as possible, the principle has been used in this study, which has a wide theoretical base and uses several research approaches, the results of which can be compared to see if they corroborate one another.

5.1.3 Hospital surveys

The question of whether to conduct patient surveys in hospital or in the patient's home after discharge has been addressed by several researchers (Carstairs, 1970; Raphael, 1969). Reviewing this question French (1981) concluded that

"the balance of evidence suggests that patients are more ready to voice criticism while they are still in hospital... the available evidence about memory and the change in perspectives and opinions suggests most strongly that the research should be carried out as close to the relevant events as possible".

French (1981) also cited evidence that even when interviewing patients at home privacy is not always possible. It is also cheaper to conduct surveys in hospital rather than at home after discharge (French, 1981). Nevertheless, there remains the problem, particularly relevant to surveys of patients and relatives, that subjects may be reluctant to express critical responses because of fear of later repercussions from the staff upon whom they are so dependent.

5.1.4 Questionnaires and interviews

The main methods of collecting survey data, in which subjects are directly questioned, are interviews and questionnaires, each of which has different characteristics and is suitable in different circumstances.

Tightly structured interview schedules and questionnaires permit standardisation, statistical analysis and comparisons among subjects, but breadth is gained at the expense of depth. Loosely structured interviews and questionnaires permit the collection of "richer", more penetrating data, but analysis is more difficult and comparisons among subjects may be impossible. In view of the requirements of this survey to collect factual information about practices, to examine attitudes, and to make comparisons among subjects, a highly structured format was most appropriate. Some open-ended questions and invitations to add comments were included to enable subjects to respond more fully if they wished.

Questionnaires are considered more economical of time and effort than interviews (French, 1981). Questionnaires can study larger number of subjects, ensure subject anonymity and may elicit more frank responses and provide more uniform data than interviews (Seaman and Verhonick, 1982).

Interviews are particularly susceptible to bias because of the social interaction between interview and respondent (Davis, 1980).

Background characteristics such as age, sex, race and social class have been shown to influence subjects' responses; and both interviewer and respondent bring with them a set of perceptions, attitudes and expectations which may affect their interaction (Cannell and Kahn, 1968). The researcher may introduce bias in asking questions, probing, motivating the subject and in recording responses (Cannell and Kahn, 1968). All these sources of bias will remain hidden unless the interviews are tape recorded and transcribed, which is expensive and time-consuming.

Major sources of bias in questionnaires concern question wording, but these can be avoided by eliminating questions which are loaded, leading, over-intellectual, embarrassing and ambiguous; and by careful pilot testing. Errors in question wording are visible to readers of the research report, and thus permit more objective evaluation of the validity of questionnaires. Another problem with self-completion questionnaires is that the researcher cannot be sure that they were completed by the intended subject unaided by others.

Questionnaires were used in this survey in preference to interviews because of the nature of the information to be collected, constraints of time and money and the additional sources of bias in interviews. However, some interviewing was carried out to collect supplementary information about the subjects, and in the few cases where subjects were unable or unwilling to complete questionnaires.

5.1.5 Attitude measurement

In the questionnaire survey, attitudes of nurses, patients and relatives towards patient and family participation in care were measured. Nurses' attitudes towards the nursing process were also assessed.

This section begins by discussing the nature of attitudes. Methods of measurement are considered, including various types of attitude scales and indirect measures. Some fundamental problems of attitude measurement are considered. Finally, the type of scales developed in this study, Likert scales, are described, including the reasons for their use and the methods of developing Likert scales.

5.1.5.1 The nature of attitudes

Most definitions agree that an attitude is a psychological construct which describes the consistent tendency to react in a certain way when confronted by a particular stimulus. For example Katz (1960) defined an attitude as:

"a predisposition to evaluate or judge some symbol or object or aspect of one's world in a favourable or unfavourable manner".

It is the enduring nature of an attitude which distinguishes it from an opinion (Bond, 1974). Attitudes are thought to have three components: affective, cognitive and behavioural.

Behaviour, however, is not necessarily a good predictor of attitudes. Wicker (1969) found that behaviour is also a function of social norms, expectations regarding the consequences of particular behaviours, the presence of other people and competing attitudes. On the basis of a review of 34 empirical studies, Wicker (1969) concluded that

"the assumption that feelings are directly translated into actions has not been demonstrated".

5.1.5.2 Methods of attitude measurement

Attitudes cannot be measured directly but are inferred from their operational expression. The most common method of measurement is by self-report scales, of which there are several types. All scales measure mainly valence, that is the degree of positive or negative feeling evoked by the attitude. They do not measure the many other dimensions of an attitude, such as its breadth, intensity, stability, centrality, salience and behavioural expression.

The most commonly used attitude scaling techniques are the methods originally developed by Thurstone (Thurstone and Chave, 1929); Likert (1932); Guttman (1950); and the semantic differential technique (Osgood et al, 1957). All scales are subjective and bias can arise from various response errors discussed in Section 5.1.2.

The Thurstone technique is a method of "equal-appearing intervals" and it attempts interval scale measurement (Moser and Kalton, 1971). Scale construction requires a group of judges drawn from the type of people to be studied. The judges are used to select from a pool of statements those to be included in the final stage (Bond, 1974).

The principle of the Guttman scale lies in the choice and ordering of items. They are chosen in such a way that each statement implies a progressively stronger or weaker attitude to the stimulus than the next. Guttman developed scalogram analysis, which was concerned with the problems of unidimensionality and reproducibility. From the respondent's score it is possible to know exactly what items have been endorsed.

The Semantic Differential technique was developed by Osgood et al (1957). Subjects are asked to rate particular concepts on seven-point scales consisting of pairs of bi-polar adjectives, such as good - bad, strong - weak, etc. The technique is used widely in market research to test the image of products.

In addition to scales, other methods of attitude measurement are available. Projective techniques assume that in an ambiguous situation, attitudes will be revealed in the way the subject interprets uncertain stimuli. Examples include play techniques, sentence completion, writing stories, filling in cartoon bubbles and describing blurred pictures. Direct behaviour may be observed, either in a natural setting or a contrived experiment. Physiological responses to attitude objects or their symbolic representations may be recorded. Measures of arousal include pupillary dilation, galvanic skin response and pulse rate.

5.1.5.3 Likert scales

In this study Likert scales were developed to measure attitudes towards patient and family participation in care and attitudes towards the nursing process.

Likert scales consist of a series of unidimensional attitude statements, to each of which the subject indicates strength of agreement/disagreement on a five (or occasionally three or seven) point response scale. Response categories are assigned scores which are summed giving each subject a total score for that attitude. It is usual to word half the items positively and half negatively. To be consistent in scoring, negative items are reverse scored.

Likert scales produce a rank ordering of subjects on the dimension being measured, but they do not reach interval level of measurement. As ordinal scales there is inevitably a highly subjective element in the interpretation of the meaning of the results by the researcher. Likert scales are fairly easy to construct and often achieve good test-retest reliability. As subjects indicate their degree of agreement/disagreement, they are more sensitive than Thurstone scales.

Limitations of Likert scales include poor reproducibility, that is different subjects may achieve an identical total scale score, which may be derived from very different patterns of responses to individual items. It is often difficult to check the validity of the scale against external criteria, but internal consistency and homogeneity can be checked by inter-item correlations. Likert scales are very vulnerable to response bias.

Four alternative types of attitude scales could have been used, but it was decided to use the Likert technique for the study. It would have been difficult to recruit suitable judges for the Thurstone technique and Likert scales have been found to correlate well with Thurstone scales anyway (Edwards and Kenney, 1946). Likert scale construction is also less laborious than Thurstone scale construction (Oppenheim, 1966). The Guttman method would have been inappropriate as too little is known about the

dimensions being measured to rank items meaningfully. Semantic differential techniques also seemed unsuitable because of the abstract nature of the concept being measured. Because of these problems the Likert technique seemed to be the best choice for this research.

The technique of Likert scale development

Techniques of scale development are described fully in Moser and Kalton (1971) and Oppenheim (1966). This section summarises the necessary steps, which are discussed in more detail in the relevant empirical sections.

A large pool of positively and negatively worded items is developed and tested on a sample of at least 100 suitable subjects. Judges respond to each item by choosing the response category that best describes their attitude i.e. they respond as research subjects. Individual test scores are noted and summed for a total score. Total scores can be correlated against some external criterion of the subject's attitude if a suitable criterion exists.

The researcher decides which items to retain by carrying out an item analysis. Each item could be correlated against an external criterion of the attitude and items with low correlations are discarded. Because external criteria are rarely available, it is usual to correlate individual item scores with the total scale scores with the item score omitted. Items that do not correlate highly with the total scale score are discarded as not measuring the same as the other items.

Another method of item analysis is to select the overall highest scoring and lowest scoring subjects (usually 25% of each) and check which items discriminate well between these two groups of subjects.

Factor analysis is sometimes used in the development of Likert scales. However, scale development was subsidiary to the more important aim of collecting information about subjects' attitudes. It was therefore decided that factor analysis, which is a complex technique, was beyond the scope of this study.

5.1.6 Methodological designs

Methodological research is that which aims to develop new instruments, methods, procedures or theories (Abdellah and Levine, 1979). It involves invention and evaluation rather than the more usual steps of data collection, analysis etc. To some the development of measuring tools is not research in the strictest sense, but Greenberg (1962) cited in Abdellah and Levine (1979) classified the development and refinement of methods of measurement as pure or basic research.

One criterion for evaluating methodological research is pragmatic: how well does the instrument work in practice. Anastasi (1976) proposed a series of criteria for test evaluation, including features applicable to nearly all tests. These were used during the testing of the nursing process measuring scale and include validity, reliability, the existence of norms and practical features.

A wide range of methodological research has been carried out in nursing, mainly in the USA. Examples include the quality of patient care instruments in Section 4.5.4; patient classification methods, such as the progressive patient care methodology (Haldeman and Abdellah, 1959); methods of personnel measurement such as job satisfaction (Wright, 1957), and clinical assessment such as susceptibility to pressure sore development (Norton et al, 1975).

5.1.7 Observation

Observation was used in this study in two ways: in the survey to supplement information from the self-completion questionnaires and interviews; and as a method of obtaining data about the use of nursing process in hospital wards during the development of the NP measuring scale.

Non-participant observation was used to obtain quantifiable data and to avoid subjectivity resulting from over-involvement with the subjects. In all cases the observations were undertaken with specific objectives and operational definitions in mind; were systematically planned and recorded using predetermined categories on observation schedules; were checked and controlled as far as possible; and were related to the conceptual bases of the study. Thus the observations fulfilled the criteria defined by Seaman and Verhonick (1982) for scientific objective observation.

The technique of observation is helpful in finding out how people actually behave in their natural setting (Crow, 1984), but the observer must be aware of the possible impact of his or her presence on those being observed. Researcher bias or expectancy may influence the recording of data or inferences made about the intentions of the subject (Rosenthal and Rosnow, 1969). It is therefore preferable to report overt behaviour rather than to infer meaning from the behaviour. The observation schedules and the research techniques were pilot tested, detailed instructions were prepared for the observer(s), and results were reported in full, all of which helped to reduce bias.

Hall (1978) proposed that observation should be used in nursing research as part of a composite strategy to increase confidence in the findings, because of the particular risks of bias associated with observation. Triangulation was used in this study.

Attention was given to the validity and reliability of the observations in this study. During observations on the use of nursing process in wards, two observers worked together to obtain estimates of inter-rater reliability. The data obtained from observations were also correlated with data obtained from other sources, such as nurses' ratings of the use of nursing process in their wards.

5.2 CHARACTERISTICS OF THE RESEARCH INSTRUMENTS

In this study attention was given to the reliability, validity and sensitivity of all the instruments used. The NP measuring scale and the questionnaires on patient and family participation in care were tested both during their development and subsequent data analysis. In this section the concepts of reliability, validity and sensitivity are explained and the main types of reliability and validity are outlined.

5.2.1 Reliability

In its broadest sense, reliability indicates the extent to which individual differences in test scores are attributable to true differences in the characteristics under consideration and the extent to which they are attributable to chance errors (Anastasi, 1976). Kerlinger (1973) defines reliability as "the proportion of 'true' variance to the total obtained variance of the data yielded by a measuring instrument". Cronbach (1970) prefers to refer to "consistency", that is the homogeneity of the test, and "stability" over time. Reliability is a relative concept, in part a function of test length and sample characteristics. As all types of reliability are concerned with the degree of consistency between two independently derived sets of scores, it is usually expressed in terms of a correlation coefficient.

5.2.1.1 Test-retest reliability

This is the correlation between scores obtained by the same subject on two separate administrations of the test. Error variance corresponds to the random fluctuations of performance from one test performance to another. Problems are that initial testing may influence the second testing as new learning or attitudes may occur; subjects may remember and try to replicate their previous responses; response biases may become more intense; and new learning may have occurred in the intervening period (Selltitz et al, 1976).

5.2.1.2 Alternate form reliability

Two parallel forms of the same test are used, in which all items are intended to measure the same characteristics. There may be practical difficulties in constructing an alternate form of the test (Giovannetti, 1981).

5.2.1.3 Split-half reliability

This is concerned with the homogeneity of the test and is also called the coefficient of internal consistency. The test scores are divided into two comparable halves and correlated. Dividing the test into odd and even items is usual, but the test can be divided in many ways (Anastasi, 1976).

5.2.1.4 Corrected item index correlation coefficient

This is also concerned with the internal consistency of the test. Each item is correlated with its index, that is the total scale score, minus the item score, which is omitted to avoid incorrectly inflated correlation coefficients.

5.2.1.5 Cronbach's Alpha and Kuder-Richardson reliability

Alpha is the "mean of all split-half coefficients resulting from different splittings of a test", (Cronbach, 1951). It is likely to be more representative than a single split half. Similarly Kuder-Richardson reliability gives the average correlation coefficient that would be obtained if the test were split in every possible way (Cronbach, 1951). Both are based on a single administration of a single form of a test. Alpha is used with multi-scored items, whereas Kuder-Richardson is used with items for which only two possible scores occur, e.g. right or wrong.

In all tests of inter-item consistency, the more homogeneous the domain under examination, the higher the coefficient. A relevant question is whether the criterion that the test is trying to measure is itself homogeneous or heterogeneous. Thus heterogeneous test items would not necessarily represent error variance in the prediction of a heterogeneous criteria. It may be useful to construct several homogeneous tests each measuring a different aspect of the heterogeneous criterion to provide unambiguous test scores.

5.2.1.6 Scorer reliability

Scorer or inter-rater reliability is established by correlating the scores obtained by two testers. It is improved by the provision of standardised objective procedures for administration and scoring.

5.2.1.7 Index of reliability

This is the proportion of true variance in the test scores. Studies that yield more than one type of reliability coefficient for the same data permit the analysis of total score variance into different components. It is computed by adding together the error variance attributable separately to time sampling, interscorer, content sampling and content heterogeneity.

5.2.2 Validity

Validity is concerned with what the test measures and how well it does so. It is concerned with whether the test corresponds well with the underlying attributes it is supposed to be measuring. Validity is determined with reference to the use for which the test is intended.

According to Anastasi (1976):

"all procedures for determining test validity are concerned with the relationship between performance on the test and other independently observable facts about the characteristics under consideration".

A highly reliable test may not be valid, but logically a very unreliable test cannot be valid.

Face validity is a pseudo validity. It is whether the test subjectively appears to be measuring what it claims to be. It is not necessarily related to true validity, but is important for the credibility of the test.

The American Psychological Association (1974) classified validity into three major types: content, criterion-related and construct. Each will now be discussed.

5.2.2.1 Content validity

"Content validity is the representativeness or sampling adequacy of the content of a measuring instrument" (Kerlinger, 1973). It has no empirical basis, but relies on judgment and is built into the test from the outset through the choice of appropriate items. The behavioural domain to be tested must be systematically analysed to ensure that major aspects are covered by the test items and in the correct proportions.

5.2.2.2 Criterion-related validity

Performance on the test is checked against a direct and independent measure of that which the test is designed to predict. Criterion measures may be concurrent, that is available at the time of testing, or predictive, that is the criterion measures are taken some time after the test is administered. There must be grounds for thinking that the criterion scores are themselves valid and it must be ensured that test scores do not themselves influence an individual's criterion status. This is an empirical form of validity.

5.2.2.3 Construct validity

This is concerned with whether the test measures the underlying theoretical construct (Anastasi, 1976), and it is contingent upon there being an explanatory theory within which the trait to be measured features and from which it derives definition. Construct validity requires the gradual accumulation of information from a variety of sources, e.g. developmental changes, correlations with other tests, factor analysis, etc.

Factorial validity is a form of construct validity in which factor analysis is used to reduce the number of categories from an initial multiplicity of test variables to a few common factors (Harman, 1967).

Convergent and discriminant validity are further forms of construct validity. Not only should the test correlate highly with other variables with which it should theoretically correlate (convergent), but also it should not correlate significantly with variables from which it should differ (discriminant) (Campbell and Fiske, 1970).

5.2.3 Sensitivity

Sensitivity is defined as "the ability of an instrument to make the discriminations required for the research problem" (Fox, 1982). This important characteristic of measuring instruments is ignored by many researchers, yet one of the major limitations of many ordinal and nominal scales is their crudeness (Abdellah and Levine, 1979). Researchers should consider whether the apparent lack of difference after the administration of a measuring instrument really indicates no change, or that the instrument was too insensitive to detect it.

5.3 HOSPITALS USED IN THE STUDY

This section provides background information about the four hospitals at which data were collected, and explains why these particular hospitals were selected for the study. Throughout the thesis, the hospitals are referred to by number. All four hospitals were situated in London, which must limit the generalisability of the findings. People who live in the capital of a country may be different from those who live in provincial towns or in the country. London hospitals had to be used for reasons of economy as the researcher lived in London.

5.3.1 Hospital 1.

This was one of the two hospitals in which the survey of patient and family participation in nursing was carried out. Data were collected at Hospital 1 during June and July 1980, and the following information about the hospital refers to that time.

Hospital 1 was an 800 bedded district general hospital in North London, providing mainly acute services. It consisted of three old hospitals straddling two main roads, which were built as separate hospitals, but amalgamated in about 1950.

The majority of patients came from the North London catchment area which was predominantly working class, with a large immigrant population. The hospital was a designated university hospital, providing undergraduate

teaching for medical students from a London medical school. There was a large group school of nursing, providing training for the general and psychiatric registers and rolls. There were separate maternity, geriatric and psychiatric hospitals in the district. The only specialty in the district was neurology.

5.3.2 Hospital 2.

This was the second hospital in which the survey of patient and family participation in nursing was carried out. Data was collected at Hospital 2 during January and February 1981, and the following information about the hospital refers to that time.

Hospital 2 was a 400 bedded teaching hospital in Central London. About 50% of the patients came from the catchment area which had the highest number of hotel beds per square mile anywhere in London, and therefore accommodated many tourists and foreigners. About 30% of the patients came from within the district, which had both areas of severe social deprivation and affluence. The hospital was a regional and national centre for several medical and surgical specialties and so about 20% of the patients were admitted from outside London. There was a large school of nursing offering general nurse training for the register and the roll and a shortened course for graduates.

Hospitals 1 and 2 were selected for the main survey for several reasons. Preliminary discussions and visits indicated that some general medical and surgical wards were using NP, and that there were other wards in the hospitals which were reasonably comparable except that they were not using NP. This was the main criterion for selection. Other hospitals in London which had been approached earlier fulfilled the main criterion, but were not willing to take part as they had other research programmes taking place in their medical and surgical wards. An important practical consideration was that senior nursing staff in the two hospitals selected were interested in nursing research and willing to support the study. Two hospitals were used as a means of increasing the generalisability of the findings. Two hospitals with very different characteristics were deliberately selected: one a teaching hospital in Central London; the other a district general hospital in a predominantly working class area.

5.3.3 Hospital 3.

This was the hospital at which the reliability, validity and sensitivity of the NP measuring scale was tested. Data were collected from November 1981 to February 1982 and a small follow-up study was undertaken during May and June 1983.

Hospital 3 was a large teaching hospital which moved from old buildings in Central London to a modern building in South West London in 1973. There were about 800 beds providing mainly acute services. The catchment area was socially mixed, including working class, middle class and very wealthy areas. There was a high proportion of elderly people in the catchment area. As the hospital had specialist renal and oncology units, a high proportion of patients were admitted from outside London.

There was a large school of nursing offering training for the general register, a shortened course for graduates, three post-basic courses, and a four-year combined general and paediatric nursing course in collaboration with a hospital for sick children. Many of the staff nurses were graduates from a BSc/SRN course which used to run in collaboration with Hospital 3.

5.3.4 Hospital 4.

This is the hospital in which the pilot studies for the survey of patient and family participation in nursing care were carried out. The pilot studies took place in April and May 1980.

Hospital 4 was a post-graduate teaching hospital located on two sites, of which the Central London site was used for this study. It was the first specialised oncology hospital in Europe and is considered one of the leading centres for oncology. Hospital 4 had no catchment area but most patients were admitted from the metropolitan regions. 5 to 10% of patients were admitted from abroad.

The Department of Nursing Studies offered post-basic courses for registered and enrolled nurses in oncology nursing, the care of the dying, stoma care and research appreciation.

PART 2: SURVEY OF PATIENT AND FAMILY PARTICIPATION
IN NURSING

PART 2. CHAPTER 6.INTRODUCTION AND PILOT STUDY

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PART 2. CHAPTER 6.

INTRODUCTION AND PILOT STUDY

Part 2 describes the questionnaire survey carried out in two London health districts to examine current practices and attitudes towards patient and family participation in nursing. This chapter introduces the study and its overall design. It describes the development of the questionnaires and the pilot studies. Chapter 7 describes the procedure of the main study, the validity and reliability of the questionnaires and the treatment of results. Chapter 8 presents the results and Chapter 9 contains the discussion.

6.1 AIMS OF THE STUDY

Reasons for this study and the initial problem formulation were discussed in Section 1.1. The five main aims were described in the same section. It was also hoped that relevant parts of the questionnaires could be developed into valid and reliable attitude measurement scales for use in subsequent studies. Section 5.1.1. contains a general introduction to the use of survey methods and explains why a questionnaire survey was selected as the main method of data collection. The questionnaires were supplemented with some interviewing and observations, both of which are discussed in Sections 5.1.4 and 5.1.7.

6.2 HYPOTHESES

Hypotheses were developed mainly from an examination of previous research literature. However, their formulation was also influenced by personal observations of nursing practices in several hospitals and discussions with experienced nurses. Six hypotheses were developed:

1. Patients and their families currently have very little involvement in the assessment, planning and implementation of their nursing care.
2. Patients and relatives who express favourable attitudes towards the issue of participation and who desire increased participation will tend to be young, well educated, middle class and not anxious.
3. Patients in wards using NP will perceive themselves as more involved in their care than those in wards not using NP and will express more positive attitudes towards patient and family participation.
4. Nurses working in wards using NP will express more positive attitudes towards patient and family participation than nurses working in wards not using NP.

5. Nurses who express positive attitudes towards patient and family participation in care will tend to hold favourable attitudes towards NP, be more senior and better educated.
6. Wards and Units do not have official policies concerned with patient and family participation in nursing. Nurses in training are not taught about these issues.

6.3 DESIGN OF THE STUDY

This survey of attitudes and current practices concerning patient and family participation in nursing was carried out in two health districts. It was hoped to collect data in eight wards in each hospital, half surgical and half medical, matched in all respects except that NP would be used in one half but not in the other.

It was intended that data would be collected from approximately 100 nurses, 100 patients and 100 patients' relatives, randomly selected and approximately equal numbers from each ward i.e. approximately six nurses, six patients and six relatives. Relatives would be linked to particular patients in the sample. It was hoped to include about half male and half female patients. About ten to thirteen per cent of the nurses should be men because that was the proportion of men in nursing in England in 1981 to 1982 (DHSS, 1982; GNC, 1982). It was hoped that young adults, middle aged and elderly people would be equally represented in the patient sample. It was hoped that equal numbers of nurses at all levels of seniority could be recruited.

The researcher planned to spend about three days in each ward distributing and collecting questionnaires. Supplementary information would be collected by observation, interviewing and examination of records.

Figure 6.1. Summary of the proposed survey design

2 hospitals

16 wards, 8 in each hospital

8 medical and 8 surgical wards, 4 medical and 4 surgical in each hospital

8 nursing process and 8 non-nursing process wards, matched in other respects

300 subjects, 100 nurses, 100 patients, 100 relatives, equal numbers from each ward and each hospital

patient subjects - $\frac{1}{2}$ male, $\frac{1}{2}$ female; one-third young adults, one-third middle aged, one-third elderly

relative subjects - each linked to one patient, therefore no age or gender restrictions.

nurse subjects - 10% to 13% male, one-third learners, one-third qualified ward-based, one-third senior.

6.4 DEVELOPMENT OF QUESTIONNAIRES

Three separate but closely related questionnaires were designed for nurses, patients and relatives. Different sections of the questionnaires were intended to test the various hypotheses. The design and wording of the forms were guided by an examination of the literature; discussions with hospital patients, their relatives, nurses of all grades and health care researchers; and personal observations of nursing practices in several hospitals and types of ward.

Questions focussed on assessment, planning and implementation of care. It was originally intended that patient and family participation in all four stages of the NP would be studied. However, preliminary investigations showed that hospitals using NP had not begun systematic evaluation of care and the concept of evaluation was unfamiliar and ill-understood in hospitals not using NP. It was therefore thought that questions about evaluation would confuse many subjects and reduce the validity of the questionnaires.

The questionnaires were re-written several times before they were pilot tested. At each stage of their development they were pre-tested on colleagues, students, friends and family, using a procedure similar to that employed in the pilot study.

6.5 DESCRIPTION OF QUESTIONNAIRES PRIOR TO PILOT TESTING

The nurses' questionnaire was nine bound A4 size pages long, and the patients' and relatives' questionnaires were both eight bound pages. Each section will be described in order:

6.5.1 Letter

Questionnaires began with a brief explanatory letter which was similar for all groups of subjects (see Appendix Part 2 Number 1). The letters emphasised anonymity and confidentiality and stressed that there were no right or wrong answers. The letters did not explain the purpose of the research but said it concerned "the views of patients, nurses and relatives towards aspects of nursing care in hospitals".

6.5.2 General information paper

Questions on this page, which were different for each group of subjects, were either open-ended or required the subject to tick one from a choice of between three and six responses. The nurses' questions assessed familiarity with NP including time on NP wards, reading and attendance at teaching sessions. The patients' questionnaire assessed knowledge of diagnosis and treatment, number of previous admissions,

previous employment in hospitals and level of anxiety. The relatives were asked similar questions to the patients, as well as questions about their relationship to the patient and the length of their journey to hospital. Copies are at Appendix Part 2 Number 2.

6.5.3 "Attitudes towards patient and family participation in nursing" scale.

This three page scale was identical for the three subject groups. A copy is at Appendix Part 2 Number 3. Subjects were asked to complete 12 attitude items by ticking whichever of seven columns best described their views of the statement. Subjects responded on a seven point Likert-type scale ranging from "strongly agree" through "don't know" to "strongly disagree".

The scale was intended to measure, at an ordinal level, attitudes towards patient and family participation in assessment, planning and implementation of nursing. The statements were designed to be comprehensible to all subject groups. Half the 32 statements concerned patient participation and half concerned relative participation. Within those two subgroups half the items considered the decision-making aspects of nursing (assessment and planning) and half considered the implementation of care. There were thus four subscales each containing eight items.

1. Attitudes towards patient participation in assessment and planning of care (patient decision-making subscale). Example of item:
 "Patients must accept that whilst in hospital they have no right to question nurses' decisions about what needs to be done to them";
2. Attitudes towards patient participation in the implementation of care (patient implementation subscale). Example of item:
 "As far as possible, patients should be allowed to decide for themselves when they want to wash and bath";
3. Attitudes towards relative participation in assessment and planning of care (relative decision-making subscale). Example of item:
 "In planning a course of rehabilitation after a stroke, the nearest relatives should be invited to contribute their ideas";
4. Attitudes towards relative participation in the implementation of care (relative implementation subscale). Example of item:
 "It will only lead to problems for the nurses if relatives are allowed to do too much for the patient".

To avoid the systematic operation of the response sets of acquiescence and negativism (Cronbach, 1946), items were counter-balanced with about half worded to reflect a positive attitude towards patient and family participation and about half worded to reflect a negative attitude.

| Stages of the nursing process | PATIENTS | | RELATIVES | | Total number of items |
|-------------------------------|---------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------|
| | <u>Positive wording</u> Item number or general | <u>Negative wording</u> Item number or general | <u>Positive wording</u> Item number or general | <u>Negative wording</u> Item number or general | |
| Decision-making | assessment | 4 general 25 specific | 18 specific 32 general | 19 specific 8 general | 28 general 14 general 8 |
| | planning | 23 specific 6 general | 20 specific 10 general | 31 specific 16 specific | 30 specific 1 general 8 |
| | implementation | 13 specific 12 general 15 specific 9 specific 17 general | 11 specific 3 general 22 specific | 27 specific 29 specific 26 specific 5 general | 7 specific 2 specific 24 general 21 general 16 |
| Total number of items | 9 | 7 | 8 | 8 | 32 |

Figure 6.2

Distribution and balancing of items in the "Attitudes towards patient and family participation in nursing" scale, prior to pilot testing.

18 items were concerned with specific aspects of care e.g. application of ointments and writing fluid charts, and 14 were concerned with more general statements about nursing, e.g.

"Nurses should encourage patients to be as independent as possible"

6.5.4 Nurses' "organisation of care" scale

This eight item scale assessed how much the nurse encouraged patient and family participation and was given to nurses only (see Appendix Part 2 Number 4). There were two statements about each of the following: patient participation in decision-making; patient participation in implementation of care; relative participation in decision-making; and relative participation in implementation of care. One of each pair was worded positively and one negatively to reduce response bias. Subjects were asked to respond by ticking "never", "sometimes", "often", "always" or "don't know". One example from the scale is:

"I discourage the family from doing anything for the patient while he or she is in the care of the hospital."

6.5.5 "Involvement in care during this stay in hospital" scale

This eight item scale assessed the extent to which the patient or relative perceived they had participated in care during the current stay in hospital. The forms given to patients and relatives differed only in the wording of the questions, and were broadly comparable to the nurses' "organisation of care" scale. Copies are at Appendix Part 2 Number 5. There were two questions about each of the following: patient participation in decision-making; patient participation in implementation of care; relative participation in decision-making; and relative participation in implementation of care. One of each pair was worded positively and one negatively. Subjects used the same response categories as in the "organisation of care" scale. One example from the patients' scale is:

"How often were your relatives allowed to help with your care in various ways?"

6.5.6 "Ideal involvement in care" scale

This eight item scale assessed the extent to which patients and relatives would ideally like to participate in care. This was designed to identify perceived discrepancies between actual and ideal levels of participation, by comparing scores on this scale with the "involvement in care during this stay in hospital" scale. The forms given to patients and relatives differed only in detailed wording (see Appendix Part 2 Number 6). The format and content of the items and response categories were identical to the two previously described scales. One example from

the relatives' scale is:

"I would like to be able to help my relative by doing simple nursing tasks for him/her"

6.5.7 "Care activities in hospital" scale

This page was similar for the three groups of subjects (see Appendix Part 2 Number 7). An examination of popular British and American general nursing textbooks (e.g. Bickerton et al, 1979; Brunner and Suddarth, 1974; Burrowes and Reakes, 1979; Clarke, 1979; Darwin et al, 1972; Henderson and Nite, 1978; Roper, 1973; Sorenson and Luckmann, 1979; and Wolff et al, 1979) revealed 20 common nursing procedures which at least some authors claimed could be carried out by patients and/or relatives under suitable conditions. Examples included filling in fluid charts, urine testing, helping patients to eat or drink and washing patients in bed. Suitability to carry out such tasks would depend on the patient's condition and ability; the relative's willingness, availability and ability; and appropriate training by nurses.

In this section nurses were asked to indicate whether they considered that nurses, patients and/or patients' relatives would be able to carry out each of the listed procedures. Patients and relatives were asked to tick whether each of the 20 procedures had been performed by a nurse, patient and/or relative during this stay in hospital.

6.5.8 Official policies towards some nursing issues

This part of the questionnaire was given to nurses only (see Appendix Part 2 Number 8). This was the only part of the questionnaire which used open-ended questions that would not be statistically analysed. Nurses were asked to describe what policies existed in their ward or unit towards each of four issues, and what nurses in training were taught. The four issues were:

- the participation of patients in planning nursing;
- the participation of relatives in planning nursing;
- the extent to which patients are encouraged to assist with their own nursing; and
- the extent to which relatives are encouraged to assist with the patient's nursing.

6.5.9 Nurses' "attitudes towards the nursing process" scale

This was given to nurses only (see Appendix Part 2 Number 9). The scale assessed nurses' attitudes towards NP by asking them to rate the effect of NP on 13 aspects of nursing which according to the literature (see Chapter 4) could be affected by the use of NP. Examples included

the nurse-patient relationship, sisters' job satisfaction, time spent on paperwork and nurses' learning opportunities. The effect on each item was rated on a five point scale ranging from "very good" to "very bad" with "don't know" as the midpoint.

6.5.10 Sample characteristics

This final page was identical for the three groups of subjects (see Appendix Part 2 Number 10). Subjects were asked for information about sex, age, marital status, occupation, educational and professional/technical qualifications and nationality. Personal questions were deliberately left until the end of the questionnaire to avoid antagonising subjects. This page thanked subjects for completing the questionnaire and asked them to check that no questions had been omitted.

6.6 DESCRIPTION OF OTHER INSTRUMENTS, PRIOR TO PILOT TESTING

6.6.1 Ward information sheet

This single sheet was used to record background information about any ward involved in the research. It included purely factual information such as the names of the hospital, ward, sister(s), nursing officers (NO's) and medical staff; the location and type of ward, number of beds and ward layout, sex of patients, staffing patterns and level of activity, e.g. operating and admission days. This factual information could be collected by simply asking the sister.

There was next a series of items about the use of NP which required observation and discussions with nurses. These included NP score, length of time NP used in the ward, how work was organised and general comments. Finally more impressionistic information based on observations for at least one shift were recorded, which included ward atmosphere and general comments about the staff and the ward. A copy is at Appendix Part 2 Number 11).

6.6.2 Interview schedules

These single page forms were designed to be completed by the researcher when distributing questionnaires (see Appendix Part 2 Number 12). Separate versions were produced for nurses and patients. As relatives' questionnaires were usually given to and collected from patients, information about relatives was included on patients' interview schedules.

Both forms contained brief notes to remind the researcher what information to give to the subject at their first meeting. Both contained space to record date, time, subject's name, ward, hospital and code number to permit identification for collection of questionnaires. The date, time

and place of appointment to collect the questionnaires was included and a check that the subject would still be available for at least two more days. Both forms included space for the researcher to record subjective impressions of the subject which were relevant to the study, such as attitudes to the research and the issues, willingness and capability to take part in the study, emotional and intellectual factors, etc. Both forms recorded the researcher's observation of the subject's nationality in case this was omitted from the self-completion questionnaire, being regarded by some as a sensitive subject.

The nurses' schedules recorded the present grade, to ensure the correct number of subjects at each level of seniority. The patients' forms included information obtained from the notes or Kardex to ensure that the patient fulfilled the criteria for inclusion. This was completed before approaching a potential subject, to avoid wasting their time if they were not eligible for inclusion. Accurate information on diagnosis, tests and treatment were also required to check the accuracy of information given by patients and relatives. The patients' interview schedule included a section to record information about relatives. It was necessary to collect from patients as much information as possible about relatives to confirm the relatives' suitability for inclusion in the sample.

6.7 THE PILOT STUDY

This was a small scale trial of the research method and an opportunity to test all aspects of the design for feasibility and practicality. It was essential to test the questionnaires and other instruments to identify ambiguous and incomprehensible questions and items which failed to discriminate well among subjects.

6.7.1 The Hospital

Hospital 4 (H4) which is described in Section 5.3.4, was selected for the pilot study because it fulfilled the main criterion of having comparable NP and non-NP wards. It was also conveniently located close to the researcher's place of work. It was necessary to use a different hospital for the pilot study because the presence of a researcher carrying out pilot studies several months prior to a main study in the same hospital could have stimulated interest about patient and family participation in nursing. This could have influenced opinion and practices, thus contaminating the main study results. A preliminary visit to the hospital resulted in the identification of two suitable wards whose sisters were willing to participate. Permission to collect data was obtained from the Director of Nursing and the Director of Nursing Research.

6.7.2 The wards

Ward 1 was a surgical ward for breast disease and Ward 2 was a medical oncology ward in which patients were treated with radiotherapy and chemotherapy.

Ward 1 was selected because of previous contact with the sister, who was interested in nursing research and committed to the development of NP. She subsequently co-authored a book about care planning. Information from the Director of Nursing Research and the clinical NO confirmed that NP was in use.

Ward 2 was selected as a comparable non NP ward, although all patients in the hospital had a nursing history taken on admission. Information from the sister, clinical NO and Director of Nursing Research confirmed that Ward 2 used a traditional task-oriented approach at that time.

6.7.3 The subjects

As it is usual to carry out pilot testing on about ten per cent of the total sample, it was intended to give questionnaires to ten nurses, ten patients and ten relatives.

Questionnaires were completed by ten patients, half on each ward. There were four men and six women, with an age range of 20 to 71 (mean age 51 years). Two subjects had professional jobs, five were skilled or semi-skilled and three were unskilled. Data from an eleventh subject was discarded as two-thirds of the questionnaire was left blank. She was later found to be clinically depressed.

Questionnaires were completed by only eight relatives as it was difficult to find visitors willing to give up their time. Five relatives were related to patients in the sample, but as the remaining patients had no suitable relatives, three relatives were independently recruited. Relatives included two spouses, two daughters, two siblings and two mothers. There were five women and three men. Three relatives were from Ward 1 and five from Ward 2. Six relatives described themselves or their spouses as having professional or technical occupations and two gave no information on occupation.

Ten nurses completed the questionnaires, of whom two were NO's, one a sister, two SN's, one SEN, three students and one pupil nurse. There were eight women and two men in the group. Eight subjects were unmarried. Seven nurses were in the 18 to 34 age group and three in the 35 to 51 age group. Two nurses held degrees, two had 'A' levels, four had 'O' levels and two had CSE passes.

As the hospital had no pre-registration/enrolment nurses, the four learners were recruited from Hospital 3 (H3), described in Section 5.3.3. H3 is the London teaching hospital used in the development of the NP scale, but not in the questionnaire survey. As the researcher did some clinical teaching there, she had contact with student and pupil nurses.

6.7.4 The procedure

Data were collected in April and May 1980 and five days were spent in the hospital. The first few hours on each ward were spent observing nursing activities and the ward information sheet was completed. The use of NP was tested using the first draft of the NP scale, the development of which is described in Part 3 of the thesis. A copy of the scale used in the pilot study is at Appendix Part 3 Number 1. At this time the scale had not been refined and was used in its earliest version, as developed from the literature. The scale was completed by asking each ward sister to respond "yes" or "no" to each of the 65 items.

Half the nurses and patients were given questionnaires, the purpose of the study explained as in the main study, and an appointment made to collect the forms. When the researcher returned, the subject was given an explanation of the nature of pilot studies and the various sections of the questionnaires were critically discussed. The remaining nurse and patient subjects were asked to complete their forms with the researcher present, so that comments, criticisms and timing could be noted immediately.

Five relatives' questionnaires were given to the patients with whom they were linked and the researcher talked with three of those relatives after they had completed the forms. Three relatives were approached directly and two completed questionnaires in the presence of the researcher.

6.7.5 Results and discussion

In view of the small number of subjects (ten nurses, ten patients and eight relatives), the results were not computer analysed. A combination of descriptive and inferential statistics were used, but visual inspection of the data and consideration of the subjects' comments were most important.

In this section each part of the questionnaires and other instruments will be discussed. The differences between the two wards, general points and the overall results will be considered. Modifications to the questionnaires as a result of the pilot study will be outlined.

6.7.5.1 The letter (Appendix Part 2 Number 1)

All subjects were satisfied with the letter and none wanted any additional information.

6.7.5.2 General information page (Appendix Part 2 Number 2)

This was completed satisfactorily by all nurses. The only difference between the two wards was that nurses on Ward 1 (n = 3) perceived that they were encouraged to read about the NP more than nurses on Ward 2 (n = 3).

All the patients completed this page satisfactorily, although three described their tests but not treatment. The wording of that item was changed to "What treatment and tests are you having... ?" There were no differences between the two wards for accuracy of information or reported anxiety. Only two patients, one from each ward, did not describe their condition as cancer. Most patients described themselves as "very worried" or "not at all worried". The medical patients with multiple admissions were the least worried.

All relatives completed this page adequately. They were mostly accurate about diagnosis and treatment and were all moderately or very worried.

6.7.5.3 "Attitudes towards patient and family participation in nursing" scale (Appendix Part 2 Number 3).

General features of the scale

Several subjects in each group criticised the seven-point scale because of the difficulty of making fine discriminations. This was subsequently changed to a five-point scale. The layout was satisfactory except that the forms were thought to look too crowded and the absence of a line under the response categories caused several subjects to miss the first question on each page. This was modified accordingly. The scale was considered too long and several patients complained that this part of the questionnaire was too complex, laborious and boring.

Specific items

Item analysis of a Likert type attitude scale requires at least 100 and more usually 250 to 300 subjects (Oppenheim, 1966). As the pilot study had a sample of only 28, conventional item-analysis was not appropriate. The main study sample provided enough subjects for the more complex validity and reliability testing.

Table 6.1. (see over - p. 150)

| | strongly agree | moderately agree | slightly agree | don't know | slightly disagree | moderately disagree | strongly disagree | No response | total percentage of no responses and don't knows |
|----------------|-------------------|---------------------|-------------------|------------|----------------------|------------------------|----------------------|----------------|-----------------------------------------------------------------|
| Item number | % | % | % | % | % | % | % | % | |
| 1 | 29 | 8 | 8 | 17 | 4 | 8 | 17 | 11 | 38 |
| 2 | 4 | 11 | 4 | 25 | 4 | 11 | 37 | 4 | 29 |
| 3 | 50 | 8 | 8 | 4 | 4 | 8 | 17 | 0 | 4 |
| 4 | 29 | 32 | 16 | 11 | 0 | 4 | 8 | 0 | 11 |
| 5 | 88 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 42 | 21 | 11 | 4 | 8 | 4 | 11 | 0 | 4 |
| 7 | 29 | 17 | 17 | 21 | 4 | 0 | 4 | 8 | 29 |
| 8 | 38 | 29 | 17 | 8 | 0 | 4 | 4 | 0 | 8 |
| 9 | 11 | 29 | 8 | 4 | 0 | 0 | 42 | 0 | 4 |
| 10 | 0 | 8 | 4 | 4 | 21 | 11 | 50 | 0 | 4 |
| 11 | 25 | 11 | 8 | 12 | 8 | 4 | 29 | 4 | 16 |
| 12 | 63 | 25 | 8 | 0 | 0 | 4 | 0 | 0 | 0 |
| 13 | 42 | 37 | 8 | 0 | 0 | 8 | 4 | 0 | 0 |
| 14 | 8 | 8 | 0 | 11 | 11 | 0 | 50 | 4 | 15 |
| 15 | 33 | 21 | 0 | 8 | 4 | 4 | 29 | 0 | 8 |
| 16 | 74 | 8 | 4 | 4 | 0 | 4 | 4 | 0 | 4 |
| 17 | 66 | 25 | 0 | 0 | 0 | 4 | 4 | 0 | 0 |
| 18 | 21 | 21 | 0 | 4 | 21 | 4 | 29 | 0 | 4 |
| 19 | 37 | 21 | 8 | 17 | 0 | 8 | 8 | 0 | 17 |
| 20 | 29 | 11 | 8 | 8 | 4 | 17 | 21 | 0 | 8 |
| 21 | 25 | 11 | 8 | 4 | 8 | 4 | 33 | 4 | 8 |
| 22 | 42 | 17 | 8 | 4 | 8 | 8 | 11 | 0 | 4 |
| 23 | 17 | 46 | 17 | 0 | 4 | 4 | 11 | 0 | 0 |
| 24 | 21 | 17 | 4 | 4 | 8 | 21 | 17 | 4 | 8 |
| 25 | 37 | 8 | 8 | 33 | 0 | 0 | 11 | 0 | 33 |
| 26 | 59 | 17 | 8 | 0 | 4 | 0 | 4 | 4 | 4 |
| 27 | 74 | 8 | 4 | 8 | 4 | 4 | 0 | 0 | 8 |
| 28 | 42 | 11 | 8 | 0 | 11 | 11 | 11 | 4 | 4 |
| 29 | 79 | 8 | 8 | 0 | 0 | 0 | 0 | 4 | 4 |
| 30 | 8 | 4 | 0 | 17 | 0 | 4 | 66 | 0 | 17 |
| 31 | 63 | 8 | 11 | 0 | 0 | 8 | 8 | 0 | 0 |
| 32 | 25 | 33 | 8 | 4 | 4 | 8 | 17 | 0 | 4 |

Table 6.1 Percentage of pilot subjects' responses (n = 28) in each response category for each item of the "Attitudes towards patient and family participation in nursing" scale. (Percentages rounded to nearest whole number).

The scores for each item were examined to identify those which failed to discriminate well among subjects, which appeared from inspection not to correlate highly with other items, and which were either left blank or scored "don't know" by subjects. Subjects' comments were also considered. It was hoped to shorten the scale by about 25 to 50%.

Item 1 was discarded because over a third of the subjects were either unable to answer or responded "don't know".

Item 2 was discarded because several patients commented that they felt unable to respond as they knew nothing about handicapped children.

Item 3 discriminated well among the subject groups. Nearly all patients strongly agreed, whereas a high proportion of nurses disagreed. It was retained.

Item 4 was retained.

Item 5 was retained

Item 6 was retained. A fair spread of scores indicated ability to discriminate.

Item 7 was criticised by several subjects and nearly a third could neither agree nor disagree. It was discarded.

Item 8 was retained.

Item 9 was retained as a good discriminator. Most patients strongly disagreed with this whereas most nurses agreed.

Item 10 was retained. 82% of subjects disagreed, to varying extents. No subjects strongly agreed and very few agreed at all. This pattern of responses confirmed that the response tendency of acquiescence was not operating strongly with this group of subjects.

Item 11 was discarded. Three patients wrote that they were unable to answer without knowledge of diabetes. Two nurses commented that there might be medical reasons for administration by nurses.

Item 12 was retained. All nurses strongly agreed with this, whereas patients and relatives tended to agree only slightly or moderately.

Item 13 was retained. Nurses agreed with this more strongly than patients or relatives.

Item 14 was discarded. Two nurses and one patient whose other responses indicated a strongly positive attitude towards patient and family participation responded "strongly agree" to this item in contradiction to

other expressed attitudes. The item may have been misread as "It is likely that...". 15% of subjects neither agreed nor disagreed, suggesting some confusion.

Item 15 produced a broad range of responses with about equal numbers of "strongly agree" and "strongly disagree". Nurses responded more positively to this than the other two subject groups. It was retained.

Item 16 was retained.

Item 17 was retained. As two nurses commented that the answer depended on whether it was medically safe, the words were added "... and it is medically safe".

Item 18 was a good discriminator with 42% agreement and 44% disagreement. Nurses disagreed more strongly than patients or relatives.

Item 19 was discarded. 17% of subjects, all patients and nurses were unable to answer. Several commented that they knew nothing about diabetes.

Item 20 was retained. This discriminated clearly between subject groups. Nurses disagreed, whereas many patients and relatives agreed. Approximately equal numbers of subjects agreed and disagreed.

Item 21 was retained. Approximately equal numbers of subjects agreed and disagreed. Nurses disagreed most strongly, followed by relatives. Patients tended to agree.

Item 22 was retained. Nurses were more likely to disagree with this than patients or relatives.

Item 23 was retained.

Item 24 was an excellent discriminator with responses evenly spread across the response categories. Nurses tended to disagree fairly strongly, relatives tended to disagree slightly or moderately. Patients tended to agree. The item was retained.

Item 25 was criticised by six subjects, from all three groups. Subjects commented that only a midwife or mother could answer. As a third of the subjects either left this blank or answered "don't know" it was discarded.

Item 26 was retained.

Item 27 was retained

Item 28 produced a good range of responses; about a third disagreed and two-thirds agreed. Nurses were most likely to disagree, followed by relatives. Patients tended to agree. This was retained.

Item 29 was retained.

Item 30 was discarded. Two subjects, both patients, commented that they initially misread unnecessary as necessary.

Item 31 was retained.

Item 32 was retained because it produced a wide range of responses, with about two-thirds agreement and about one-third disagreement.

Range of scores

Each item was scored from 1 to 7, with higher scores representing a more positive attitude. With a total of 32 items the possible range of total scores was 32 to 224. The actual range of total scores was 108 to 214, covering some 56% of the possible distribution. The range of actual mean scores for each item was 3.4 to 6.7.

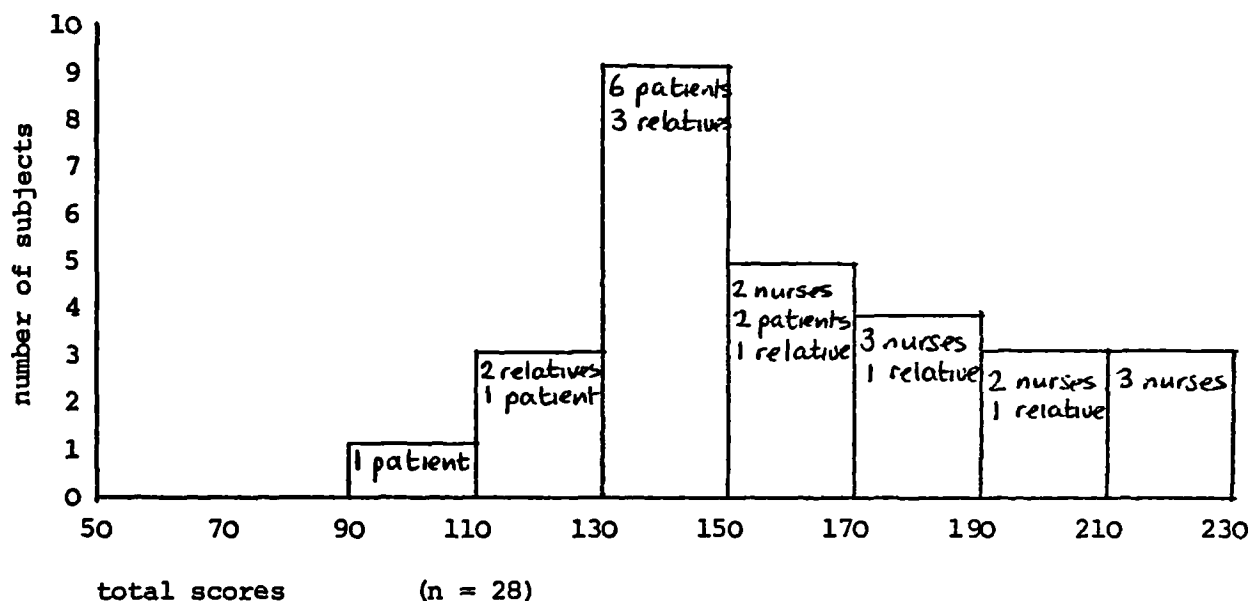


Figure 6.3.

The distribution of total scores showing the number of pilot subjects who scored in each category, for the "Attitudes towards patient and family participation in nursing" scale

Figure 6.3 also shows the differential distribution of scores from each of the three subject groups. Nurses appeared to have the highest scores, patients the lowest and relatives in between. Overall, there is a wide distribution of scores, although skewed towards the higher scores.

"Floor" and "ceiling effects" have been avoided.

Differences among the three subject groups

A one-way analysis of variance (ANOVA) for unequal sample sizes was carried out on the total scores to look for statistical differences between the three subject groups:

| <u>Sources of variance</u> | <u>sum of squares</u> | <u>degrees of freedom</u> <u>(df)</u> | <u>mean square</u> | <u>f</u> |
|----------------------------|-----------------------|------------------------------------------|--------------------|----------|
| between groups | 1139.23 | 2 | 569.6 | 0.097 |
| error | 147318.2 | 25 | 5892.7 | |

not significant

Differences between the two wards

Wilcoxon ranked sum tests for two independent samples showed no significant differences in total scores between the two wards either for all subjects ($n = 24$), nurses ($n = 6$), patients ($n = 10$) or relatives ($n = 8$). The four learner nurses from H3 were excluded from the calculations.

Modifications to the scale

The following items from the original scale (see Appendix Part 2 Number 3) were discarded: numbers 1, 2, 7, 11, 14, 19, 25 and 30. Thus eight out of 32 (one quarter) of the original items were discarded, leaving 24.

Figure 6.4 below can be compared with Figure 6.2 which gives the same information prior to pilot testing. It can be seen that the balance of items was changed by the pilot study. For example, there were 14 items about patients, but only 10 about relatives. There were 13 items concerning implementation of care, but only 11 concerning decision-making. Nevertheless, the revised scale still covered a wide range of topics and included both positively and negatively worded items, and both specific and general items.

(Fig. 6.4 over - p.155)

| Stages of the nursing process | PATIENTS | | RELATIVES | | Total number of items |
|-------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------|
| | <u>Positive wording</u> <u>Item</u> <u>specific</u> <u>number</u> <u>or</u> <u>general</u> | <u>Negative wording</u> <u>Item</u> <u>specific</u> <u>number</u> <u>or</u> <u>general</u> | <u>Positive wording</u> <u>Item</u> <u>specific</u> <u>number</u> <u>or</u> <u>general</u> | <u>Negative wording</u> <u>Item</u> <u>specific</u> <u>number</u> <u>or</u> <u>general</u> | |
| Decision-making | assessment 4 general | 18 specific 32 general | 8 general | 28 general | 5 |
| | planning 23 specific 6 general | 20 specific 10 general | 31 specific 16 specific | — | 11 6 |
| Implementation | 13 specific 12 general 15 specific 9 specific 17 general | 3 general 22 specific | 27 specific 29 specific 26 specific 5 general | 24 general 21 general | 13 |
| total number of items | 8 | 6 | 7 | 3 | 24 |

Figure 6.4.

Distribution and balancing of items in the "Attitudes towards patient and family participation in nursing" scale, after pilot testing.

6.7.5.4 Nurses' "organisation of care" scale (Appendix Part 2 Number 4)

Items were scored from 1 to 4, so that high scores indicated care organised to allow patient and family participation. With a total of eight items, there was a possible range of total scores from 8 to 32. The actual range of total scores was from 22 to 31 and the range of mean scores for each item was from 2.8 to 3.9. Thus about 37% of the available range was used, and the distribution was skewed towards the higher scores.

Visual inspection revealed no differences between the scores of nurses (n = 6) attached to the two wards. There were no differences between the scores of the ward-based qualified nurses (n = 4) and the student and pupil nurses (n = 4). The 2 NO's obtained higher total scores (30 and 31) than any of the other nurses.

Scores for the pairs of items, one worded positively, one negatively, tended to be consistent for each respondent. This confirmed that scores were not determined by response biases.

One nurse commented that she had observed that "foreign patients often assume it is natural and normal to participate and have their families participate". Another nurse commented that despite her "good intentions", relatives were not always available or willing to participate. Both NO's commented that nurses might tend to give what they thought was the right answer.

No difficulties were reported in the completion of this scale and all the items were answered satisfactorily. No changes were made for the main study.

6.7.5.5 "Involvement in care during this stay in hospital" scale (Appendix Part 2 Number 5).

The questions on the patients' and the relatives' scales were identical except for minor variations in wording. Each of the eight items was scored from 1 to 4, with high scores indicating a high level of patient and/or relative participation. There was a possible range of total scores from 4 to 32. The actual range of total scores was 14 to 28, spanning 50% of the available distribution and skewed towards the higher scores.

Inspection of the data revealed lower total scores for relatives than for patients. This was not checked statistically because of the high proportion of incomplete forms. There were no apparent differences between the two wards.

Three of the ten patients left two or more blanks and another two

patients responded "don't know" to at least one item. Thus only five patients completed the scale fully. Of the eight relatives, one left the whole form blank and wrote that she knew nothing about these questions. A further five relatives responded "don't know" to at least one item. Only two of the eight relatives completed the scale fully.

The completed forms were examined for consistency within the pairs of items, one worded positively and the other negatively. Of the five patients and two relatives who completed the scale fully, one patient and one relative showed a very inconsistent pattern of responses, which suggested misunderstanding of some questions.

Generally subjects appeared to find these questions difficult and they were slow to fill in their forms. One patient and one relative commented that they were reluctant to appear to criticise the nurses.

Questions 1, 2, 3 and 8, all of which were negatively worded, caused most difficulty and appeared to be misunderstood. Two subjects commented that if they were not asked about something, they could not know if it had happened, so logically these questions could not be answered. Subsequently, these four questions were discarded, leaving only the positively worded item of each pair. In response to subjects' criticisms, questions 4, 5, 6 and 7 were reworded so that each began "how often...".

6.7.5.6 "Ideal involvement in care" scale (Appendix Part 2 Number 6)

This scale was similar in structure, format and scoring to the "involvement in care during this stay in hospital" scale. The range of total scores was 17 to 29, 43% of the available distribution and skewed towards the upper end of the range.

In contrast to the previous scale relatives obtained higher total scores than patients, although this could not be statistically tested because of the number of incomplete forms. Taken together these tentative findings suggest that relatives perceived a lower degree of current patient and family participation than patients, but expressed a stronger desire for participation than did patients. There were no differences between the two wards discernable from visual examination of the data.

Two of the ten patients left one or more blanks and another three patients responded "don't know" to at least one item. Only five patients completed the scale fully. Of the eight relatives one left the whole form blank, one left one item blank and three responded "don't know" to one item. Three of the eight relatives completed the scale fully.

Clearly inconsistent responses for pairs of similar items were found in the scores of three patients and two relatives, suggesting misunderstanding of some questions.

Two patients commented that this scale was easier to understand than the previous one. Another two subjects found the response categories unsuitable for the wording of the questions. Four patients and one relative criticised the negatively worded questions as confusing, especially when a negative answer was required. This was confirmed in an examination of responses to individual items. The highest proportion of blanks and "don't knows" were found in the negatively worded items i.e. 1, 3, 4 and 6. These were subsequently discarded.

Because of criticisms of the question wording in relation to the response categories, the four remaining questions were reworded to begin "how often...".

The eight remaining questions from this and the previous scale were put onto a single page, shortening the patient and relative questionnaires by a further page. The heading of the "ideal involvement in care" scale was shortened to "how much involvement in care would you ideally like?"

6.7.5.7 "Care activities in hospital" scale (Appendix Part 2 Number 7).

None of the subjects had difficulty with this form and there were few critical comments. One nurse left the form blank but wrote that "all these activities could be undertaken by patients or relatives given practice under supervision...". That was assumed to mean a tick for nurse, patient and relative for every item. No differences between the two wards were detectable from inspection of the data.

All nurses agreed that all the care activities could be carried out by nurses. All patients and relatives agreed that more of the care activities were carried out by nurses than by patients or relatives. Patients reported an average of 10.7 activities carried out by nurses, and relatives reported an average of 10.1. This confirmed that the care activities chosen were very common procedures.

Only one patient, a young man, reported that care had been given by his relative: his mother had given care in eleven categories. Two relatives reported having given care, one the mother just mentioned, the other a middle-aged husband. Four nurses indicated that all the activities could be carried out by relatives. Two nurses agreed that all, except taking the pulse, could be done by relatives. The remaining nurses considered that between seven and sixteen activities were suitable for relatives.

Three patients reported no self-care, but the others reported that between five and eight activities had been carried out by themselves. Two relatives reported no patient self-care. The remainder reported that between one and five of the activities had been done by the patient. Two nurses agreed that all activities could be done by the patient. The other nurses considered that between seven and fourteen of the activities were appropriate for self-care. The more senior nurses seemed to advocate more patient self-care and relative participation than the junior nurses.

6.7.5.8 Official policies towards some nursing issues (Appendix Part 3 Number 8).

This page of open ended questions was given to nurses only. All except one nurse answered all questions satisfactorily and some answered in great detail. The SEN who left the form blank explained that she did not know the answers so wrote nothing. As no other subjects misunderstood the form this was assumed to be an aberrant response. Some subjects were confused by the heading "official policies towards some nursing issues". This was subsequently removed.

None of the nurses described any formal policies, but most thought that patient and family participation was encouraged to varying degrees. The qualified nurses had little knowledge about what nurses in training were taught, but the learner nurses described varying amounts of informal discussion of the subject during study blocks.

6.7.5.9 Nurses' "attitudes towards the nursing process" scale (Appendix Part 2 Number 9)

Two nurses criticised the response categories: they disliked the forced choice between "good" and "bad", when they considered that the NP had no effect on some of the items. A "no effect" response category was subsequently added between "good" and "don't know". The heading "attitudes towards the nursing process" seemed to influence subjects' responses. One subject suggested that as she had a positive attitude to the NP, perhaps she should tick "very good" for every item. The heading was therefore removed.

The scores for each item were examined to identify those which failed to discriminate well among subjects, which appeared not to correlate with other items, or were left blank or scored "don't know" frequently. Subjects' comments were also considered.

The term "patients' problems" in Item 3 was interpreted in different ways: either as routine needs for nursing; or as specific emotional or psychological difficulties. Two subjects wrote that NP made no difference.

One nurse wrote that it depended on the nurse-patient relationship (Item 4). Item 3 was discarded.

Item 7, "ward efficiency", produced a broad range of responses but three subjects pointed out that it was not necessarily desirable as it assumed a mechanistic, production-oriented view of nursing. This item was discarded.

The only other item which did not appear to correlate highly with the others was Item 13, "time spent on paperwork". This obtained substantially lower scores than the other items. However it generated much additional comment and was clearly seen as important by nurses, so it was retained. All the other items were retained as they were well understood and provided a reasonable spread of responses and correlated highly with one another.

The range of scores

Each item was scored from 1 to 5, from "very bad" to "very good". With 13 items in the original scale, the possible range of total scores was 13 to 65. The actual range was 29 to 63, covering 65% of the possible distribution.

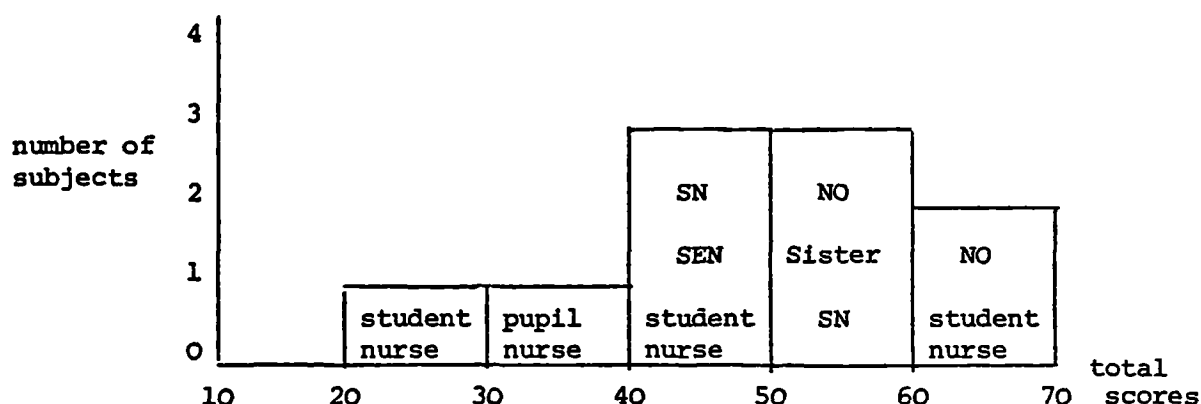


Figure 6.5 The distribution of total scores on the nurses "attitudes towards the nursing process" scale, showing the number and seniority of pilot subjects in each category.

There was a wide distribution. Although skewed towards the higher scores there was no "Ceiling effect". There was a tendency for junior nurses to obtain lower scores than senior nurses. There were no apparent differences between the two wards.

6.7.5.10 Sample characteristics (Appendix Part 2 Number 10).

This page was satisfactorily completed by all subjects and no modifications were necessary. All subjects understood the questions and most were willing to provide information. Two subjects asked the meaning of "other" in the marital status question and one suggested changing it to

cohabiting. However, as "other" could include various types of relationship this was not changed. Two female patients left the spouse's occupation section blank, which could be interpreted as refusal to answer, or unemployed or retired spouse. The solution is to check questionnaires at collection and then enquire about unanswered items.

6.7.5.11 Other instruments used in the pilot study

The ward information sheet (Appendix Part 2 Number 11) was easy to use and provided all necessary information. It was therefore not changed.

As described in Section 6.7.4 the NP scale was used in its earliest version and clearly discriminated between the two wards in the predicted direction. Ward 1 scored 39 and Ward 2 scored 28, both out of 65. The relatively small difference between the two wards may result from the use of an admission nursing history in both wards at the time, and the lack of goal identification at that time in Ward 1, which was described as the ward using NP. The method of using the scale in the pilot study is critically discussed in Chapter 11.

The interview schedules for patients and nurses (Appendix Part 2 Number 12) were easy to use and provided all necessary information. They were not altered.

6.7.5.12 Discussion of the pilot study

On the basis of the findings considerable modifications were made to the questionnaires, which were shortened, simplified and made clearer. To make the questionnaires more attractive and readily identifiable, light cardboard covers in different colours for each subject group were attached (see Appendix Part 2 Numbers 13, 14 and 15).

The representativeness of the pilot study was reduced by its location in a specialised oncology hospital. It became apparent that desire for participation in care may be influenced by the experience of a life-threatening disease, as opposed to simple surgery and curable acute medical conditions likely to be encountered in the main study hospital. The psychological effects of cancer may have made patients and relatives more passive and more dependent on nurses.

Some subjects experienced difficulties because of the length and complexity of the questionnaires and the abstract nature of the issues under consideration. Responses from some of the less educated patients indicated inconsistent attitudes and opinions. This could have resulted from the presence of the researcher, increasing the demand characteristics

of the research and subject acquiescence; or could be associated with genuine absence of opinions about the issues, resulting in random responding.

The revised questionnaires were tested on six new subjects (two patients, two relatives and two qualified nurses) in the same wards and hospital. Subjects' responses indicated that the revised forms were easier to understand, slightly quicker to complete (range ten to 35 minutes) and unambiguous.

PART 2. CHAPTER 7

MAIN STUDY AND TREATMENT OF RESULTS

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PART 2. CHAPTER 7.

MAIN STUDY AND TREATMENT OF RESULTS

7.1 MAIN STUDY

7.1.1 Hospitals and administration

Data were collected from two hospitals described in Sections 5.3. In summary, Hospital 1 (H1) was a district general hospital in North London and Hospital 2 (H2) was a teaching hospital in Central London. Reasons for collecting data in two hospitals and for selecting these particular hospitals are discussed in Section 5.3.

Following initial correspondence with the Divisional Nursing Officer at H1, meetings were arranged with the District Nursing Officer and Divisional Nursing Officer, from whom permission to carry out the study was obtained. At H2 initial contact was made through the Director of Nursing Education, followed by correspondence and meetings with the District Nursing Officer and Director of Nursing Education. H1 nominated an NO and H2 a senior nursing officer (SNO) and senior tutor to liaise with the researcher during data collection and to provide detailed information.

Both hospitals provided accommodation, which made it possible to collect data in the evenings and weekends when the wards were not busy. Informal meetings were held with representatives of the major trades unions in each hospital to ensure good will.

When data collection was completed letters of thanks were sent to the senior nurses who had facilitated the study and to the ward sisters (see Appendix Part 2 Number 16). Copies of a conference paper based on the study were later sent to each hospital with an offer to give a talk about the research.

7.1.2 Ethical considerations

Full information about the research, including copies of instruments, was submitted to the District Nursing Officer and other senior nurses at both hospitals for ethical consideration. H2 required the project to be submitted to the District Ethics Committee. One medical member of the Committee requested that letters to patients, relatives and nurses should include the following statements: "I have no official connection with this hospital or ward" and "you are under no obligation to take part in this project should you not wish to do so". These statements were added.

The study was planned and carried out in accordance with the guidelines concerning ethics in nursing research prepared by the Rcn (1977). The literature review revealed that the information sought was not already

available and that the study had the potential to contribute to knowledge. The researcher's academic and professional background qualified her to carry out this study and she was supervised by an experienced researcher. The results of the study were made public.

As the subjects were cognitively-intact adults, informed consent could be obtained from the subjects themselves. Subjects were fully informed about what their participation entailed and were told explicitly that they could refuse to take part. Subjects could not be given a full explanation of the study before completing questionnaires because of the risk of invalidating the results, but were offered a full explanation after completing questionnaires. Subjects received a letter from the researcher at the beginning of the study, giving them a written record of the researcher's identity and a brief description of the nature of the study. Complete confidentiality was assured and maintained. Subjects were required to give verbal rather than written consent for several reasons: the study was not physically invasive, nor overtly emotionally stressful, nor involved risk to the subject; and subjects' participation in the study was simple and short lived.

7.1.3 Research instruments

The development of questionnaires and modifications resulting from the pilot study were discussed in Chapter 6. Copies of the questionnaires for nurses, patients and relatives, as used in the main study are at Appendix Part 2 Numbers 13, 14 and 15. Copies of the ward information sheet and the interview schedules for patients and nurses, which were not altered after the pilot study, are at Appendix Part 2 Numbers 11 and 12. Copies of the first and revised drafts of the NP scale as used in the main study are at Appendix Part 3 Numbers 1 and 7.

7.1.4 The wards

The design (see Section 6.3) specified that data would be collected from eight wards in each hospital, half medical and half surgical, matched in all respects except that NP would be used in one half, but not in the other.

Discussions with nurse managers and ward sisters at H1 revealed that only three wards were using NP as a pilot study. Therefore data were collected from only six wards, the three which used NP and three similar wards which were said to be using a task-oriented approach.

In order to increase the total range of wards, data were collected from ten wards in H2 where it was general policy to change to NP. Discussions with ward sisters and nurse managers indicated that half the wards were

using NP to some extent having been involved in the pilot scheme and half were using a task-oriented approach.

All 16 wards had learner nurses working on them. Half the wards were acute medical and half were surgical. As the study intended to examine mainly acutely ill adult patients with "normal" mental capabilities, wards with a high proportion of cognitively-impaired patients were excluded, such as geriatric, long-stay, psychiatric and mental handicap wards.

7.1.5 Subjects and sampling

7.1.5.1 Patients

It was planned to survey 100 patients, half in each hospital, half in NP and half in non-NP wards, half male and half female, half in medical and half in surgical wards. Criteria for inclusion in the sample were that the patients:

- had spent a minimum of four days in the ward and would remain for at least two more;
- were aged 18 - 68;
- were physically and mentally capable of responding rationally;
- had adequate eyesight to read the questionnaires;
- lived in Britain and spoke fluent English;
- had no current mental illness or other disorder which could affect cognitive functioning; and
- had a close adult relative or friend, with whom the patient lived and who visited frequently.

The researcher established eligibility by checking relevant information in the nursing care plans/kardex, and randomly selected the required number of subjects. Permission to interview particular patients was obtained from the sister, but staff were not asked to nominate patients for inclusion as this has been shown to result in the exclusion of "difficult patients" (Raphael, 1977).

7.1.5.2 Relatives

It was hoped to have 100 relatives, each attached to a patient, in the sample. The criteria for inclusion of relatives were similar to those used for patients. Information about the relatives' eligibility for inclusion was obtained from discussion with the patient. Eligibility proved difficult to check, as the researcher rarely met the relatives, but had to rely on information given by the patient, therefore some relative subjects did not fulfil all the criteria for inclusion.

7.1.5.3 Nurses

It was intended to give questionnaires to 100 nurses, half from each hospital. Auxiliaries, tutors, research nurses, part-time nurses and night

nurses were excluded. It was hoped to recruit equal numbers from each of the following groups:

1. senior management - NO's and above;
2. first-line management - sisters/charge nurses, SN's and SEN's; and
3. main work force - student and pupil nurses.

It was hoped to sample half of Groups 2 and 3 from wards using NP and half from wards not using NP. The subjects must have worked on that ward for at least a week.

7.1.6 Procedure

7.1.6.1. Initial period of observation

Approximately a month was spent at H1 collecting data in June and July 1980 and about a month at H2 in January and February 1981. The researcher, who worked alone, wore the white national uniform for qualified nurses, which was not uniform in either hospital, with the GNC badge for registered nurses and a name tag. This identified her as a nurse, while dissociating her from that particular hospital.

In each hospital the first few days were spent getting to know the hospital, meeting staff and visiting wards to assess their suitability. Following this period of observation ward information sheets were completed outlining staffing patterns, levels of activity, ward layout, organisation of work, ward atmosphere etc. (see Appendix Part 2 Number 11).

Figure 7.1 Summary description of each ward in Hospital 1.) see over...
 Figure 7.2 Summary description of each ward in Hospital 2.) pp. 169 - 171.

7.1.6.2 Measurement of the use of nursing process

The development of the scale to quantify the extent to which general wards use NP is described in Part 3. The scale was developed at about the same time as the questionnaire survey was carried out.

At the time of data collection the scale had not undergone revision and was therefore used in its first draft (see Appendix Part 3 Number 1). However, by the time the data were analysed the scale had been revised (see Appendix Part 3 Number 7). Therefore, to increase validity, subjects' responses to the items which were discarded from the first draft following validation of the scale by the panel of experts (see Section 10.3 and its subsections) were discarded from the analysis. The revised scale contained three additional items suggested by the panel (see Section 10.3.4.5). As the first draft of the scale had been used in data collection, responses concerning the three new items were not available.

Therefore, the version of the scale about which data were analysed

| | Type of ward | sex of patients | number of beds | layout | pattern of staffing | predicted NP use | organisation of nursing | comments |
|--------|------------------------------------------------------------------------|-----------------|----------------|-------------------------|----------------------------------|-------------------------------------|-------------------------|-------------------------------------------------|
| Ward 1 | medical-diabetes, bronchitis, renal and skin | mixed | 30 | small bays | 2 sisters, junior learners | in use 18 months | patient allocation | - |
| Ward 2 | medical-rheumatic, bronchitis, hypertension and myocardial infarctions | mixed | 30 | small bays | 2 sisters and 7 qualified nurses | in use 18 months | patient allocation | - |
| Ward 3 | medical - neurology | female | 20 | Nightingale and singles | not recorded | in use 4 months - keen to implement | not recorded | - |
| Ward 4 | medical - neurology | male | 20 | Nightingale and singles | mainly agency nurses | absent | task allocation | traditional autocratic sister, tense atmosphere |
| Ward 5 | surgery - general and gynaecological | female | 24 | Nightingale and singles | not recorded | absent | team nursing | very busy, surgery 5 days a week |
| Ward 6 | orthopaedic | male | 28 | Nightingale and singles | 2 sisters | using Kardex but keen to start NP | | - |

Figure 7.1

Summary description of each ward in Hospital 1.

| | Type of ward | sex of patients | number of beds | layout | pattern of staffing | predicted NP use | organisation of nursing | comments |
|--------|---------------------------------------------------|-----------------|----------------|---------------------------|-------------------------------------------|----------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------|
| Ward 1 | medical - cardio-thoracic | mixed | 27 | 3 small Nightingale areas | mainly trained nurses and senior students | used for 6 months here and by sister in another hospital | patient allocation | energetic knowledgeable sister, happy informal atmosphere |
| Ward 2 | orthopaedic | mixed | 24 | small bays | not recorded | not used | team nursing and task allocation | - |
| Ward 3 | professorial unit for general surgery | male | 18 | Nightingale | 2 sisters | in use but needs development | patient allocation for several days | busy graduate sister |
| Ward 4 | surgery - general and ear, nose and throat | female | 24 | Nightingale | 2 sisters | keen to try | patient allocation | - |
| Ward 5 | surgery - ear, nose and throat and genito-urinary | male | 20 | Nightingale | vacancy for 2nd sister | sister considers it unsuitable for many patients | patient allocation but if busy task allocation | very busy, surgery 5 days a week |

Continued

Figure 7.2

Summary description of each ward in Hospital 2. (wards 1 - 5)

(see also following page no. 171) (wards 6 - 10)

... Cont. (Fig. 7.2)

| | Type of ward | sex of patients | number of beds | layout | pattern of staffing | predicted NP use | organisation of nursing | comments |
|---------|-----------------------------------------------------|-----------------|------------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|------------------------------------------|-----------------|
| Ward 6 | professorial unit for general surgery | female | 17 (plus 7 staff beds not used in study) | Nightingale plus separate staff bay | 2 sisters | quite keen | not recorded | - |
| Ward 7 | surgery - cardio-vascular and cardio-thoracic | mixed | 27 | 3 small Nightingale areas | 2 sisters and many qualified nurses | not recorded | mainly patient allocation but some tasks | - |
| Ward 8 | medical - general gastro-enterology and dermatology | mainly female | 29 | four areas | 2 sisters | sister dubious | team nursing | moderately busy |
| Ward 9 | medical - gastro-enterology and diabetes | male | 15 | Nightingale | not recorded | use has diminished since sister left | not recorded | - |
| Ward 10 | professorial medical unit | female | 18 | Nightingale | adequately staffed | low scores | by tasks | - |

Figure 7.2 (cont.)

Summary description of each ward in Hospital 2 (Wards 6 - 10)

consists of the 43 items in the revised scale (Appendix Part 3 Number 7). minus items number 32, 35 and 36, which were the new items, leaving a total of 40 items.

The instrument was administered prior to the main data collection, because the presence of the researcher on the wards could have influenced practice in relation to the use of NP.

Data from the pilot studies and the first few wards of the main study indicated that sisters were sometimes reluctant to criticise practices in their own wards and thus produced obviously inflated scores. Therefore two staff nurses or enrolled nurses were asked to provide information as an additional check. In the case of disagreement, the mean score for each item from the three respondents was used. Subjects responded to each of the 40 items in the nursing process scale with:

yes (score 2)

to some extent (score 1)

or no (score 0)

thus producing a range of possible scores from 0 to 80.

7.1.6.3 Distribution and collection of questionnaires

The researcher introduced herself and asked the patient to read the letter contained in the questionnaire. The patient was then invited to take part in the study and asked if his or her relative would participate. If the patient consented the interview schedule was completed and the patient was given questionnaires for him or herself and for the relative. Patients who were unwilling to involve their relatives were only given a questionnaire for themselves. The questionnaire(s) were collected a day or two later by appointment and checked for omissions which were rectified immediately. If interested, patients were then given more information about the study, but were asked not to discuss it with other patients.

The procedure for nurses was very similar to that used for patients. NO's and more senior nurses who were connected with the wards in the study were similarly approached. As there were too few nurses in this category, it was necessary to include NO's from other parts of the hospital. Only those in direct contact with ward patients were asked to take part.

Most relatives' questionnaires were delivered and returned via a patient. Towards the end of the data collection period in each hospital, it became apparent that insufficient questionnaires had been distributed to relatives. To increase the numbers some relatives were approached directly although the patients they were visiting were not in the study.

13 patients (11.4% of the sample of patients) were unable to complete

their own questionnaires and asked the researcher to fill them in on their behalf. In these cases the researcher sat with the patient, read the questions aloud and filled in their replies as instructed. Because of the risk of bias caused by this procedure the characteristics of this group were described separately.

7.1.7 Response rates

| | Number of subjects approached | Percentage (to nearest whole number) of questionnaires completed and returned | Number of subjects in the survey |
|-----------------------------------|-------------------------------|-------------------------------------------------------------------------------|----------------------------------|
| <u>HOSPITAL 1</u> | | | |
| Nurses | 51 | 96 | 49 |
| Patients | 67 | 82 | 55 |
| Relatives | 51 | 69 | 35 |
| Totals | 169 | mean = 82% | 139 |
| <u>HOSPITAL 2</u> | | | |
| Nurses | 61 | 95 | 58 |
| Patients | 75 | 79 | 59 |
| Relatives | 50 | 74 | 37 |
| Totals | 186 | mean = 83% | 154 |
| <u>HOSPITALS 1 and 2 COMBINED</u> | | | |
| Nurses | 112 | 95 | 107 |
| Patients | 142 | 80 | 114 |
| Relatives | 101 | 71 | 72 |
| Grand totals | 355 | mean = 82% | 293 |

Table 7.1

Questionnaire survey response rates for nurses, patients and relatives

Acceptable response rates were achieved, which were consistent between the two hospitals. The response rates for nurses refers to all subjects approached and includes those who refused initially (n = 3) as well as those who "lost" their questionnaires (n = 2). One NO objected to the lack of anonymity implicit in the code numbers written on the questionnaires. A sister and an SEN declined to participate without giving reasons. Two student nurses reported losing their forms but refused replacements.

The response rate for patients also refers to all subjects approached. Thirteen patients refused to participate giving reasons such as lack of interest, feeling unwell, business or dislike of "that sort of thing". Twelve patients took questionnaires but never returned them and were untraceable having been discharged, transferred, deteriorated or died. Three patients returned blank questionnaires. The patients who failed to return completed questionnaires included a high proportion of middle-aged to elderly women, whose case-records indicated lack of educational qualifications and membership of social class five. Several may have been illiterate.

The response rate for relatives does not include cases where patients refused to take a questionnaire for the relative when first approached. It was difficult to ascertain the reasons for refusal from relatives, but eight stated that visiting time was too short to fill in forms. It was impossible to observe any consistent characteristics among relatives who refused to participate.

7.2 COLLECTION OF SUBSIDIARY DATA ON NURSES' ATTITUDES TOWARDS PATIENT AND FAMILY PARTICIPATION IN CARE

Additional data were collected in December 1984/January 1985 as part of a teaching exercise on attitude measurement. This was carried out by the researcher with a class of eleven part-time post-graduate students in Nursing Studies at Chelsea College, University of London. The aims of the exercise were to give the students experience in collecting data using a Likert-type attitude scale and to discuss data analysis with the students.

Eleven MSc students were each given five copies of the 24 item "Attitudes towards patient and family participation in nursing" scale (see Section 6.7.5.3 for a description of the scale and Appendix Part 2 Number 13 for a copy). Attached to this were questions concerning the age, sex, grade, educational qualifications and area of work on the subjects (see Appendix Part 2 Number 17). The nature of the scale, its development and previous use were explained to the students. They were asked to get five copies of the scale completed by nurses of varying ages, seniority educational background and sex, who worked in a variety of clinical areas.

Thirty-four completed forms were returned by eight students on a pre-arranged date. This represented a response rate of 61.8%, 34 out of 55). Reasons for non-return were the absence of two students due to sickness (ten forms). One student forgot to bring her forms (five forms) and several students were unable to persuade five nurses to carry out the exercise (six forms).

The data were coded in class by the group. The 24 attitude items were scored from 5 (strongly agree) to 1 (strongly disagree) for positively worded items and reverse scored for negatively worded items. Thus a high score indicated a positive attitude towards patient and family participation in nursing. The codes for the nurses' areas of work were assigned on the basis of areas actually represented in the sample.

7.3 TREATMENT OF RESULTS

The data were analysed using the Statistical Package for the Social Sciences (SPSS) (Nie et al, 1975) which is a comprehensive integrated system of computer programmes designed in the USA for the analysis of social science data. Data from the three subject groups were first examined separately. A range of descriptive statistics were computed for all variables. Pairs of variables thought to be associated were analysed using the cross-tabulation programme. Various parametric and non-parametric tests were used to examine differences among variables. Results from the three subject groups were compared using ANOVA. The 5% ($p < .05$) probability level was regarded as the minimum acceptable level for statistical significance. Qualitative data were described and where appropriate were examined using content analysis.

In this section the statistical tests used are described and justifications for their use with these data are discussed.

7.3.2 Some basic statistical concepts

Throughout the results terminology such as level of measurement, degrees of freedom, one and two-tailed tests, significance levels, parametric and non-parametric tests, etc. are used without explanation. In this section concepts basic to measurement and statistics in this thesis will be very briefly outlined.

7.3.2.1. Levels of measurement

The traditional classification was developed by Stevens (1946) and is important because statistical techniques are appropriate only for data measured at certain levels. At the nominal level no assumption of ordering is made, each value is a distinct category and the value serves merely as a label. In this study characteristics such as sex, marital status, nationality and hospital were measured at the nominal level.

In the ordinal level of measurement categories are ranked according to some criterion, but the distance between categories is not known. Most of the scales used for this study produced ordinal level data i.e. the "attitudes towards patient and family participation in care" scale, the "organisation of care"/"involvement in care" scales and the "attitudes towards nursing process" scale.

Interval level measurement has the additional property that the distance between categories is fixed and equal. However, there is no inherently determined zero point, so proportionate differences between values cannot be determined. Ratio level measurement has an inherently defined zero point, but is more commonly found in physical rather than social sciences. Neither interval nor ratio level measurement were achieved in this study, although several scales possessed some characteristics of interval level measurement.

7.3.2.2 Degrees of freedom

The number of degrees of freedom (df) associated with a statistical calculation reflects the number of observations or scores that are free to vary within certain restrictions inherent in the organisation of the data. In cross-tabulations the df vary with the number of rows and columns in the table.

7.3.2.3 One and two-tailed tests

If a prediction is made that the values in one sample will be greater or less than in the other the hypothesis is one-tailed. If a prediction is made that the values in the two samples will differ, but the direction of difference cannot be specified, this is a two-tailed hypothesis. The word tail refers to the visual representation of a theoretical distribution of a statistic which has a central "hump" and two "tails" that trail off indefinitely.

Assuming a 5% level of significance, a two-tailed test is located in the top and bottom 2.5% of the distribution. A one-tailed hypothesis will be located in 5% at only one end of the distribution. Thus it can be seen that in the case of a one-tailed hypothesis a less extreme value is needed to achieve significance. This is the advantage of a more specific hypothesis. In this study, mainly two tailed tests were employed, because the direction of differences between variables could not usually be predicted in advance.

7.3.2.4 Significance levels

A finding is conventionally described as statistically significant if the probability of its being the product of chance alone is .05 or less. At the 5% level, there is a one in 20 chance that the result occurred by chance. A Type I error is to reject the hypothesis of no difference (null hypothesis, H_0) when it is true. The significance level is the probability of committing a Type I error (Siegel, 1956).

A more stringent significance level, such as .01 or .001 reduces the risk of a Type I error, but increases the risk of a Type II error, i.e.

the null hypothesis is accepted when in fact it is false, thus real differences are not detected.

7.3.2.5 Parametric and non-parametric tests

Non-parametric or distribution-free statistical tests make few assumptions about the underlying distribution of variables. Parametric tests make many assumptions, which limit the circumstances in which they may be used. However, parametric tests are more likely to reject the null hypothesis when it is false, that is they are more powerful than the equivalent non-parametric procedures. According to Siegal (1956) the following conditions should be fulfilled to justify the use of parametric tests: the observations must be independent; they must be drawn from normally distributed populations with homogeneity of variance; and the variables must be measured in at least the interval scale. This latter requirement would invalidate the use of parametric procedures with most of these data.

However, there have been many studies which have demonstrated that the effects of violating these assumptions make little difference to the t test or ANOVA. Boneau (1960) found that most violations of the assumptions of the t test produced minimal effect and concluded that the t test is extremely "robust", a term introduced by Box (1953) to characterise tests which are only inconsequentially affected by a violation of underlying assumptions. Boneau (1960) argued that the t test could be used if the two samples were nearly equal in size and the assumed underlying population distributions were roughly the same shape.

Similarly, statisticians have argued that the analysis of variance is little affected by the violations of its assumptions. Hsu and Feldt (1969) found that using two to five point scales produced only slightly different results from using continuous scales. Hays (1973) and Boneau (1960) claimed that homogeneity of variance was unimportant if the sample sizes were roughly equal. Boneau (1960) found that data did not need to be derived from normally distributed populations as long as they were nearly the same shape. Anderson (1961) argued that interval scale data was not essential if data resembled equinormality.

Therefore parametric procedures were employed in this analysis, but in some cases the results of an equivalent non-parametric test were also reported. Two-tailed tests were used to make the criterion for rejection of the null hypothesis more stringent.

7.3.3 Descriptive statistics and frequency distributions. Determination of the basic distributional characteristics of each of the variables was

the first task of data analysis. SPSS can compute frequency distribution tables for variables classified into a limited number of categories. Examination of the frequency tables was a check that variables had sufficient variability to be used in subsequent relational analysis and it permitted a check that data had been coded, punched and input correctly.

7.3.3.1 Measures of central tendency

The mode is the value which occurs most often. It can be used at any level of measurement. The median is the numerical value of the case lying on the 50th percentile when all cases have been ranked. It may be used at the ordinal or interval levels of measurement. The mean is the sum of all values divided by the number of cases. It is suitable for variables measured at the interval level. All three measures of central tendency were used in this analysis.

7.3.3.2 Measures of dispersion

The range is the difference between the minimum and maximum scores. It is suitable for any level of measurement and is usually associated with the median. The standard deviation is the square root of the variance. This powerful descriptive statistic indicates how closely the individual scores on the variable cluster around the mean. It is suitable for variables measured at the interval level and is usually associated with the mean (Coyle, 1980).

7.3.4 Cross-tabulation

A cross-tabulation is defined as "a joint frequency distribution of cases according to two or more classificatory variables" (Nie et al, 1975). The cross-tabulation programme in SPSS computes and displays contingency tables which permit the researcher to investigate sets of relationships among two or more variables. Cross-tabulations are a form of correlation coefficients in that they summarize the strength of the bivariate relationship.

The relationship depicted in a cross-tabulation table may be summarized with a measure of association or correlation or a test of statistical significance. Measures of association indicate how strongly two variables are related to one another, that is the extent to which characteristics of one sort and of another sort occur together. A test of statistical significance indicates the probability that the observed relationship could have occurred by chance. It depends not only on the strength of the observed relationship, but also on the size of the sample. The choice of measure of association or test of significance partly depends on the level at which the two variables are measured. The tests used in this study are introduced in the next sections.

7.3.4.1 The chi squared (x^2) test

The x^2 test compares the actual number of frequencies in each category with the expected number of frequencies. The greater the discrepancy, the larger x^2 becomes. This indicates whether a systematic relationship exists between two variables. The probability value for statistical significance, indicates the likelihood that the variables are related or independent, but it does not show the strength or direction of the relationship (Siegel, 1956). The direction of the relationship must be inferred from an examination of the contingency table, and is thus subject to error or bias.

The x^2 test assumes data measured at least at the nominal level and is insensitive to the effects of order. The data should consist of frequencies in discrete categories from normally distributed populations.

With one df, expected frequencies should be at least five. With more than one df, at least 80% of the expected frequencies should be at least five and none should be less than one. Fisher's Exact Probability test may be used with very small sample sizes or logically related categories may be combined until the expected frequencies are large enough (Fox, 1982).

7.3.4.2 The Kendall rank correlation coefficient (tau or r) and the Kendall coefficient of concordance (w)

The Kendall r gives a measure of the degree of correlation between two sets of ranks. At least ordinal level measurement is required for both variables. In SPSS tau b is used for square tables and tau c for rectangular tables. The Kendall r was used on data for which x^2 was unsuitable. Compared with the Pearson r, the Kendall r has a power efficiency of 91% (Siegel, 1956).

The Kendall w gives a measure of the association among more than two variables. At least ordinal level data are required which should be expressed in ranks. The Kendall w was used to measure the correlation among the three subject groups on data from the "attitudes towards patient and family participation in care" scale.

7.3.4.3 The Pearson produce-moment correlation coefficient

According to Coyle (1980) the Pearson r is "a parametric correlation coefficient which reflects the linear (straight line) relationship between two variables. It requires interval scale measurement and its significance can be tested if both variables are normally distributed and have equal variances". Its non-parametric equivalent is the Spearman rank-order correlation coefficient which applies when both variables are measured at the ordinal level. Both correlation coefficients produce scores from zero to unity which can be positive or negative.

The Pearson r was used with appropriate data as a test of significance in cross-tabulations in the main part of the data analysis. It was also used as a correlation coefficient in reliability testing as described in Section 7.4.2 and subsections.

7.3.5 Parametric tests used in the analysis

The t test of Student's t examines whether the means of two samples differ significantly. The unrelated or independent t test assumes that cases are classified into two independent groups. The related or correlated t test is used for paired observations arranged casewise e.g. a before and after measurement (Coyle, 1980).

ANOVA or the f test examines differences among more than two samples. It is concerned with the dispersion of the scores around the mean. In this study one-way ANOVA was used to compare differences among the three subject groups, with group (nurse, patient or relative) as the independent variable.

7.3.6 Non-parametric tests used in the analysis

The sign test was used to test for differences between two related samples, using plus and minus signs rather than numbers as its data. It is less powerful than the Wilcoxon signed-ranks test, but easier to calculate and its only assumption is that the variables have a continuous distribution. In this study it was used with dichotomous data from the "care activities in hospital" scale, but it can also be used with nominal or ordinal data.

The one sample runs test was used to test whether a single sample consisting of two values (in this study Hospitals 1 and 2; medical and surgical wards) is random on the basis of order rather than frequency of the scores. A run is defined as "a succession of individual symbols which are followed and preceded by different symbols or by no symbols" (Siegel, 1956).

7.3.7 Content analysis of qualitative data

Content analysis is defined as "a procedure for the categorization of verbal or behavioural data, for purposes of classification, summarization and tabulation" (Fox, 1982). Content analysis may be carried out at the manifest level, in which actual responses are transcribed in terms of some code. Content analysis at the latent level attempts to code the meaning of the responses and is thus subject to greater problems of validity and reliability. Semantic content analysis involves the generation of a set of categories from the data to represent the actual content of the responses. This may be carried out at several levels from most general to most specific. Content analysis of the feeling tone consists of classifying responses into those which are positive, negative, mixed or ambiguous.

According to Fox (1982), a content analysis code should possess the attributes of homogeneity, usefulness, mutual exclusiveness, inclusiveness (e.g. no more than 5% of responses categorised as miscellaneous), clarity and specificity. Reliability of the code itself and the coders should be considered.

Content analysis assumes that all subjects' responses share some common focus. The data from the nurses' questionnaires on "official policies towards some nursing issues", consisted of written answers to eight specific questions and were therefore suitable for content analysis. General comments made by nurses, patients and relatives in various sections of the questionnaires covered a much wider range of topics and have therefore been described less systematically, although using the principles of content analysis as far as possible.

7.4. RELIABILITY AND VALIDITY OF THE SCALES

7.4.1 Validity

Face validity was established by asking the pilot subjects what they thought the various scales were measuring. Most subjects broadly identified the subject areas of the scales. Content validity was built into the scales from the outset by the choice of appropriate items. Items were chosen from an examination of relevant literature and consultation with subject experts. All scales were exposed to rigorous pre-pilot, pilot and re-pilot testing and were revised as a result of testing. Data on concurrent criterion-related validity were provided by the correlations of the various scales with each other, which is reported in Chapter 8. No relevant external criteria were identified because of time constraints. Construct validity was not examined.

7.4.2 Reliability

As this survey was cross-sectional, test-retest reliability was not examined. Scorer (inter-rater) reliability was checked by asking a final year Nursing Studies undergraduate to carry out a blind re-coding of 15 questionnaires including the qualitative data (5 nurses, 6 patients, 4 relatives). This was 5.1% of the total. Scorer reliability was estimated to be almost perfect. No alternate forms of the scales were developed. Most reliability testing focused on the internal consistency of the scales. Pearson's product moment correlation coefficients (r) were used to calculate inter-item correlations and corrected item-index correlation coefficients were calculated. Cronbach's alpha was computed for some scales. Unless otherwise indicated all decimals are corrected to 2 places.

7.4.2.1 "Attitudes towards patient and family participation in care" scale.

Nurses

Items were arranged in blocks according to the four subscales. Of 276 correlation coefficients, 110 (40%) were significant at $p < .05$. (There were 102 significant positive correlations and only 8 significant negative correlations). Items which positively correlated most with all of the others were numbers 2, 4, 16 and 18. Items which correlated least with all of the others were numbers 1 and 6. Appendix Part 2 Number 18 shows the inter-item correlation matrix using the Pearson r .

Cumulative scores for the four subscales were correlated with each other, and each subscale was correlated with the total score.

Table 7.2

Nurses' "attitudes towards patient and family participation in care" scale: inter-subscale score correlation coefficients using the Pearson r .

| sub-scales cross-tabulated | the Pearson r | p |
|-----------------------------------------------------|-----------------|------|
| patient planning x patient implementation | .39 | .000 |
| patient planning x relative implementation | .43 | .000 |
| patient planning x relative planning | .39 | .000 |
| patient implementation x relative implementation | .34 | .000 |
| patient implementation x relative planning | .21 | .017 |
| relative planning x relative implementation | .38 | .000 |

$n = 107$, mean correlation .36

range of correlations .21 to .43

There were significant positive correlations ($p < .05$) among all 4 subscales, which indicates that they are closely related components of the same attitude, at least for these nurse subjects.

Table 7.3

Corrected item index correlation coefficients for subscales, using the Pearson r

| subscale | correlation coefficients |
|-------------------------|--------------------------|
| patient planning | .55 |
| patient implementation | .39 |
| relative planning | .43 |
| relative implementation | .52 |

Cronbach's alpha .68

Nurses' additional data

These data were derived from a class exercise carried out in December 1984/January 1985 and described in Section 7.2.

Appendix Part 2 Number 19 shows the inter-item correlation matrix using the Pearson r. Of 276 coefficients, 71 (25.7%) were significant positive correlations at $p < .05$. Items which correlated most with all of the others were numbers 4, 14 and 23. Items which correlated least with all of the others were numbers 1, 15, 8 and 9.

Table 7.4

Corrected item index correlation coefficients, using the Pearson r.

| Item number | correlation coefficients |
|-------------|--------------------------|
| 1 | -0.03 |
| 2 | 0.52* |
| 3 | 0.31 |
| 4 | 0.68* |
| 5 | 0.42* |
| 6 | 0.51* |
| 7 | 0.41* |
| 8 | 0.26 |
| 9 | 0.21 |
| 10 | 0.62* |
| 11 | 0.45* |
| 12 | 0.35* |
| 13 | 0.55* |
| 14 | 0.57* |
| 15 | 0.18 |
| 16 | 0.48* |
| 17 | 0.29 |
| 18 | 0.46* |
| 19 | 0.48* |
| 20 | 0.45* |
| 21 | 0.63* |
| 22 | 0.59* |
| 23 | 0.64* |
| 24 | 0.28 |

* correlation statistically significant at $p < .05$
n = 34

23 out of the 24 correlations were positive. Only item 1 was negatively correlated with the scale total, but that was not statistically significant. 17 out of the 24 correlations were statistically significant at $p < .05$. Cronbach's alpha was .85.

Patients

Appendix Part 2 Number 20 shows the inter-item correlation matrix using the Pearson r . Of 276 coefficients, 68 (24.6%) were significant at $p < 0.5$, of which 5 were negative and 63 were positive correlations. Items which correlated most with all of the others were number 4, 5 and 15. Items which correlated least were numbers 10 and 12.

Cumulative scores for the four subscales were correlated with each other, and each subscale was correlated with the total score.

Table 7.5.

Patients' "attitudes towards patient and family participation in care" scale: inter-subscale score correlation coefficients, using the Pearson r

| sub-scales cross-tabulated | the Pearson r | p |
|-----------------------------------------------------|-----------------|------|
| patient planning x patient implementation | .24 | .004 |
| patient planning x relative implementation | .36 | .000 |
| patient planning x relative planning | .42 | .000 |
| patient implementation x relative implementation | .19 | .019 |
| patient implementation x relative planning | .19 | .020 |
| relative planning x relative implementation | .50 | .000 |

$n = 114$, mean correlation .32

range of correlations .19 to .50

There were significant positive correlations ($p < 0.5$) among all 4 subscales, which indicates that they are closely related components of the same attitude, at least for these patient subjects.

Table 7.6 - see over (p.185).

Table 7.6

Corrected item index correlation coefficients for subscales, using the Pearson r

| subscale | correlation coefficients |
|-------------------------|--------------------------|
| patient planning | .47 |
| patient implementation | .27 |
| relative planning | .54 |
| relative implementation | .51 |

Cronbach's alpha .66

Relatives

Appendix Part 2 Number 21 shows the inter-item correlation matrix using the Pearson r. Of 276 coefficients, 90 (32.6%) were significant at $p < 0.5$, of which 5 were negative and 85 were positive correlations. The items which correlated most with other items were numbers 24, 12, 21 and 15. The items which correlated least were numbers 2, 8, 9 and 10.

Cumulative scores for the four subscales were correlated with each other and each subscale was correlated with the total score.

Table 7.7. Relatives' "attitudes towards patient and family participation in care" scale: inter-subscale score correlation coefficients, using the Pearson r

| sub-scales cross-tabulated | the Pearson r | p |
|-----------------------------------------------------|---------------|------|
| patient planning x patient implementation | .28 | .009 |
| patient planning x relative implementation | .24 | .024 |
| patient planning x relative planning | .47 | .000 |
| patient implementation x relative implementation | .55 | .000 |
| patient implementation x relative planning | .27 | .011 |
| relative planning x relative implementation | .56 | .000 |

$n = 72$, mean correlation .39

range of correlations .24 to .56

There were significant positive correlations ($p < .05$) among all 4 sub-scales, which indicates that they are closely related components of the same attitude, at least for these relative subjects.

Table 7.8.

Corrected item index correlation coefficients for subscales using the Pearson r

| subscale | correlation coefficients |
|-------------------------|--------------------------|
| patient planning | .57 |
| patient implementation | .32 |
| relative planning | .56 |
| relative implementation | .62 |

Cronbach's alpha .73

Comparison of nurses, patients and relatives

Table 7.9.

Summary of inter-item correlation matrices, using the Pearson r
(see Appendices Part 2 Numbers 18, 20 and 21)

| | NURSES | | PATIENTS | | RELATIVES | |
|------------------------|--------------|---------|--------------|---------|--------------|---------|
| | actual score | % score | actual score | % score | actual score | % score |
| number of coefficients | 276 | 100 | 276 | 100 | 276 | 100 |
| not significant | 166 | 60.1 | 208 | 75.4 | 186 | 67.3 |
| * p .05 | 53 | 19.2 | 31 | 11.2 | 40 | 14.5 |
| ** p .01 | 32 | 11.6 | 20 | 7.2 | 23 | 8.3 |
| *** p .001 | 25 | 9.1 | 17 | 6.2 | 27 | 9.8 |

Table 7.10Summary of inter-item correlation matrices(see Appendices Part 2 Numbers 18, 20 and 21)using the Pearson r, broken down into four subscalesPatient planning subscale

| | NURSES | | PATIENTS | | RELATIVES | |
|---------------------------|-----------------|------------|-----------------|------------|-----------------|------------|
| | actual score | % score | actual score | % score | actual score | % score |
| number of coefficients | 21 | 100 | 21 | 100 | 21 | 100 |
| not significant | 11 | 52.4 | 14 | 66.7 | 10 | 47.6 |
| * $p < .05$ | 3 | 14.3 | 1 | 5 | 6 | 37.8 |
| ** $p < .01$ | 5 | 23.8 | 4 | 20 | 4 | 20 |
| *** $p < .001$ | 2 | 9.5 | 2 | 9.5 | 1 | 5 |

Patient implementation subscale

| | NURSES | | PATIENTS | | RELATIVES | |
|---------------------------|-----------------|------------|-----------------|------------|-----------------|------------|
| | actual score | % score | actual score | % score | actual score | % score |
| number of coefficients | 21 | 100 | 21 | 100 | 21 | 100 |
| not significant | 13 | 61.9 | 14 | 66.7 | 16 | 76.2 |
| * $p < .05$ | 4 | 20 | 6 | 37.8 | 3 | 14.3 |
| ** $p < .01$ | 2 | 9.5 | 1 | 5 | 1 | 5 |
| *** $p < .001$ | 2 | 9.5 | 0 | 0 | 1 | 5 |

Fig. 7.12 cont.....

Table 7.10. (cont.)

Relative planning subscale

| | NURSES | | PATIENTS | | RELATIVES | |
|------------------------|--------------|---------|--------------|---------|--------------|---------|
| | actual score | % score | actual score | % score | actual score | % score |
| number of coefficients | 6 | 100 | 6 | 100 | 6 | 100 |
| not significant | 2 | 33.3 | 4 | 66.6 | 4 | 66.6 |
| * $p < .05$ | 2 | 33.3 | 1 | 16.7 | 0 | 0 |
| ** $p < .01$ | 1 | 16.7 | 1 | 16.7 | 0 | 0 |
| *** $p < .001$ | 1 | 16.7 | 0 | 0 | 2 | 33.3 |

Relative implementation subscale

| | NURSES | | PATIENTS | | RELATIVES | |
|------------------------|--------------|---------|--------------|---------|--------------|---------|
| | actual score | % score | actual score | % score | actual score | % score |
| number of coefficients | 15 | 100 | 15 | 100 | 15 | 100 |
| not significant | 7 | 46.7 | 10 | 66.7 | 10 | 66.7 |
| * $p < .05$ | 5 | 33.3 | 3 | 33.3 | 2 | 13.3 |
| ** $p < .01$ | 1 | 6.7 | 0 | 0 | 2 | 13.3 |
| *** $p < .001$ | 2 | 13.3 | 2 | 13.3 | 1 | 6.7 |

Table 7.11

Items which are positively correlated most and least frequently with all other items, using $p < .01$ as criterion of significance

| Item | NURSES | | PATIENTS | | RELATIVES | | |
|----------------------------------------|------------------------------------|-----------------------------|------------------------------------|-----------------------------|------------------------------------|----------------------------|------|
| | number of significant correlations | rank (1 is low, 24 is high) | number of significant correlations | rank (1 is low, 24 is high) | number of significant correlations | rank (1 is low 24 is high) | |
| patient planning subscale items | 2 | 8 | 23 ↑ | 4 | 18 | 1 | 3 ↓ |
| | 4 | 10 | 24 ↑ | 5 | 22.5↑ | 3 | 8.5 |
| | 7 | 6 | 19 | 3 | 13.5 | 6 | 18.5 |
| | 13 | 4 | 12 | 3 | 12.5 | 3 | 8.5 |
| | 14 | 3 | 6 | 4 | 18 | 5 | 14.5 |
| | 17 | 6 | 19 | 2 | 6.5 | 2 | 5.5 |
| | 24 | 4 | 12 | 3 | 18.5 | 7 | 22 ↑ |
| patient implement-ation subscale items | 1 | 1 | 1 ↓ | 2 | 6.5 | 5 | 14.5 |
| | 6 | 2 | 2 ↓ | 3 | 12.5 | 3 | 8.5 |
| | 8 | 4 | 12 | 2 | 6.5 | 0 | 1 ↓ |
| | 9 | 4 | 12 | 2 | 5.5 | 1 | 3 ↓ |
| | 10 | 5 | 16 | 1 | 1.5 ↓ | 1 | 3 ↓ |
| | 12 | 3 | 6 | 1 | 1.5 ↓ | 7 | 22 ↑ |
| | 16 | 7 | 21.5↑ | 2 | 6.5 | 3 | 8.5 |
| relative planning subscale items | 5 | 6 | 19 | 6 | 24 ↑ | 4 | 11.5 |
| | 11 | 4 | 12 | 4 | 18 | 5 | 14.5 |
| | 21 | 3 | 6 | 4 | 18 | 9 | 24 ↑ |
| | 23 | 3 | 6 | 2 | 6.5 | 6 | 18.5 |
| patient implement-ation subscale items | 3 | 3 | 6 | 4 | 18 | 2 | 5.5 |
| | 15 | 3 | 6 | 5 | 22.5 ↑ | 7 | 22 ↑ |
| | 18 | 7 | 21.5↑ | 4 | 18 | 6 | 18.5 |
| | 19 | 5 | 16 | 2 | 6.5 | 4 | 11.5 |
| | 20 | 5 | 16 | 4 | 18 | 6 | 18.5 |
| | 22 | 3 | 6 | 2 | 6.5 | 5 | 14.5 |

Key: ↑ highest number of significant positive correlations
 ↓ lowest number of significant positive correlations

Data presented in Section 7.4.2.1 indicate that the "Attitudes towards patient and family participation in care" scale reached reasonable levels of reliability, as indicated by internal homogeneity, across all three subject groups. This suggests that the scale is suitable for use with nurses, patients and relatives and produces consistent rather than random data. It is not surprising that data produced by nurses contained the highest proportion of significant inter-item correlations and the highest Cronbach's alpha scores (.68 and .85). Nurses were more likely than patients and relatives to be familiar with the issues and thus produce more coherent responses. Relatives had the next highest proportion of significant inter-item correlations and Cronbach's alpha (.73) and patients the lowest (.68).

The consistently positive correlations among the four subscales for each subject group suggests that attitudes towards patient and family participation in care planning and care giving may form a homogeneous cluster. However these correlations were small, with means of around .3 to .4 and more than half were not statistically significant. There were no substantial differences among the subject groups or across subscales.

There was only a limited agreement across the subject groups on items which positively correlated most and least with all other items. Item 2 was among the most highly correlated items for nurses but among the lowest correlations for relatives. Item 4 was among the most highly correlated items for nurses and patients. Item 10 was among the least highly correlated items for patients and relatives, whereas item 15 correlated very highly both for patients and relatives. Item 12 correlated highly for relatives, but very little for patients.

7.4.2.2 "Nurses' attitudes towards the nursing process" scale

Table 7.12

Inter-item correlation coefficients using the Pearson r

| Item number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | | .51 *** | .60 *** | .37 *** | .40 *** | .39 *** | .40 *** | .43 *** | .46 *** | .52 *** | .04 |
| 2 | | | .60 *** | .42 *** | .74 *** | .52 *** | .53 *** | .56 *** | .43 *** | .63 *** | .27 ** |
| 3 | | | | .44 *** | .62 *** | .50 *** | .49 *** | .53 *** | .51 *** | .64 *** | .26 ** |
| 4 | | | | | .45 *** | .59 *** | .48 *** | .45 *** | .48 *** | .48 *** | .31 *** |
| 5 | | | | | | .58 *** | .57 *** | .63 *** | .47 *** | .58 *** | .36 *** |
| 6 | | | | | | | .72 *** | .53 *** | .56 *** | .66 *** | .29 *** |
| 7 | | | | | | | | .53 *** | .47 *** | .67 *** | .27 ** |
| 8 | | | | | | | | | .63 *** | .74 *** | .18 * |
| 9 | | | | | | | | | | .64 *** | .14 |
| 10 | | | | | | | | | | | .30 *** |
| 11 | | | | | | | | | | | |

Key n = 107 significance levels * < .05, ** < .01, *** < .001

Table 7.12 shows the inter-item correlation matrix of 55 coefficients all positive, 53 (96.4%) were significant at $p < .05$, of which 49 (89.1%) were significant at $p < .001$. Items which correlated at the 0.1 % level with all other items were numbers 4, 5, 6 and 10. Item number 11 had the fewest highly significant correlations with the other items, and could be discarded in future work.

The "nurses' attitudes towards the nursing process scale" achieved a very high level of reliability as measured by inter-item correlations. With the exception of Item 11, the scale consists of a set of largely homogeneous items.

7.4.2.3 "Nurses' organisation of care" scale

Table 7.13

Inter-item correlation coefficients, using the Pearson r

| Item number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------------|---|------|-----------|------|------------|------------|------------|------------|
| 1 | | -.05 | -.02 | .26 | .11 | -.03 | .15 | .38 *** |
| 2 | | | -.21 * | -.01 | .09 | .16 | -.02 | .14 |
| 3 | | | | .13 | .18 * | -.19 * | .17 * | .21 * |
| 4 | | | | | .50 *** | .15 | .22 * | .42 *** |
| 5 | | | | | | .29 *** | .32 *** | .33 *** |
| 6 | | | | | | | .20 * | .09 |
| 7 | | | | | | | | .39 *** |
| 8 | | | | | | | | |

Key: $n = 107$ Significance level * $< .05$, ** $< .01$, *** $< .001$

Table 7.13 shows the inter-item correlation matrix. Of 28 coefficients, 15 (53.6%) were statistically significant at $p < .05$, of which 7 (25%) were significant at $p < .001$. 7 of the 28 correlations were negative, but only 2 negative correlations were statistically significant, both at the 5% level. Item numbers 5, 7 and 8 had the largest number of statistically significant positive correlations with other items and item numbers 1, 2 and 6 had the fewest.

All the pairs of related items correlated positively. Two pairs (1 and 7; 2 and 6) did not achieve statistically significant correlations. The third pair (3 and 5) were significantly correlated at the 5% level and the fourth pair (4 and 8) were correlated at 0.1% level.

Overall, the "nurses' organisation of care" scale attained a moderate level of reliability as measured by inter-item correlations.

PART 2. CHAPTER 8.

RESULTS

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RESULTS

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INTRODUCTION

The results of the questionnaire survey are presented in the following sections:

Sample characteristics of nurses, patients and relatives are described in Section 8.2 and some are cross-tabulated. Characteristics of patients whose questionnaires were completed by the researcher are compared with other patients.

Section 8.3 contains data from the "attitudes towards patient and family participation in care" scale. The distribution of responses to each attitude item and cumulative scores for the whole scale are first presented separately for each subject group. Differences among the 3 subject groups for each item, subscale scores and total scale scores are then outlined as well as other comparative data. Subjects' comments on the scale are outlined.

Findings from the "nurses' organisation of care" scale are described in Section 8.4. The distribution of scores for each item and cumulative scores are shown, some of which were cross-tabulated with other variables.

Sections 8.5 and 8.6 contain data concerning patients' and relatives' involvement in care during this stay in hospital, including the distribution of scores for each item, cumulative scores, and comparisons of scores for actual and ideal involvement in care. Data from patients and relatives are compared and subjects' comments are outlined.

Results from the "care activities in hospital" scale are presented in Section 8.7, including the distribution and cumulative scores for activities carried out/could be carried out by patients and relatives. Scores on individual items for patients and relatives are outlined, including differences between patients' and relatives' scores on each item. Then data from the 3 subject groups are compared, including item scores and cumulative scores. Subjects' general comments and comments on specific items are considered.

In Section 8.8, information about NP is divided into several parts. There is a section on the measurement of the use of NP in the wards and other information produced by that exercise. Differences among wards according to the use of NP are discussed. Next data concerning nurses' familiarity with NP are outlined. Results from the scale measuring nurses' attitudes towards NP are presented, along with nurses' comments about the use of NP.

Section 8.9 consists of the content analysis of the nurses' responses to the four open-ended questions concerning official policies towards some nursing issues.

Throughout this chapter, unless otherwise indicated, percentages are corrected to 1 decimal place, probability values to 3 decimal places, and all other decimals (correlation coefficients, t values, mean scores, etc.) are corrected to 2 decimal places.

8.1 SUMMARY OF RESULTS

In view of the length and complexity of the results section, this overview is located at the beginning rather than the end of the chapter, so that it may increase clarity and aid understanding of the details of the findings.

Sample characteristics (see Section 8.2)

The sample consisted of 107 nurses, 114 patients and 72 patients' relatives in medical and surgical wards of 2 London hospitals. Most subjects were British. The nurses were mainly young, unmarried women and ranged from learners to senior managers. The nurses had more qualifications than patients or relatives. The patient and relative samples included men and women, aged from 18 to 68, who were mostly married. More than half were employed, with social classes II and III predominating. Most patients and relatives had some knowledge of the patient's illness, tests and treatment; high levels of knowledge were associated with previous admissions, higher social class and more qualifications. More than half the patients and relatives had been hospital patients at least twice or thrice, but few had worked in hospitals. Relatives tended to be more worried about this admission than patients themselves. More than half the relatives were the spouses of a patient and the majority travelled for more than 30 minutes to reach the hospital.

Attitudes towards patient and family participation in care (see Section 8.3).

This 24 item Likert-type scale was given to all subjects and a very broad spread of attitudes was revealed. Nurses obtained the highest scores on the whole scale and on the 4 subscales. Patients obtained the lowest scores. Although the nurses' and relatives' cumulative scores were skewed towards the top of the theoretical distribution (all in the top half), there were no ceiling effects. On individual items, nurses obtained the highest scores on 20 items and relatives had the highest scores on the remaining 4 items. Patients had the lowest scores on 23 of the 24 items. Thus, the scale revealed that generally nurses had the most positive, relatives the second most positive and patients the least positive attitudes towards patient and family participation in care.

Scores on the 4 subscales were significantly associated with some other variables. Although no absolutely consistent relationships were found,

several variables were seen to be associated. Nurses with more positive attitudes tended to work at H2 and had more professional qualifications. Patients and relatives with more positive attitudes tended to have worked in hospitals, had more professional qualifications, were of higher social class, were married, were worried about this admission and were in H1.

Additional data on nurses' attitudes were obtained from 34 nurses in 8 hospitals in South East England, who were predominantly young, female, qualified nurses with 'A' levels. Their mean overall scores were higher than the main study nurses, mostly in the top quartile of the possible distribution, but there was no ceiling effect. Inspection of the data indicated that mental handicap and research nurses had the highest scores and psychiatric nurses the lowest, but groups were too small for statistical analysis. Qualified nurses obtained (non significantly) higher scores than learners and NO's obtained (non significantly) a higher proportion of high scores than other qualified nurses.

The rank order of scores for each item was highly correlated among subject groups. Items which consistently obtained the highest scores for most subject groups (including the nurses' subsidiary data) were Items 3, 8, 9, 11, 12 and 20. Items which consistently obtained the lowest scores in all subject groups were Items 1, 6, 14, 16 and 24.

Nurses' organisation of care and patients' and relatives' involvement in care during this stay in hospital (see Sections 8.4, 8.5 and 8.6).

Nurses completed an 8 item scale and patients and relatives completed comparable scales consisting of 4 questions on actual involvement in care during this stay in hospital and 4 questions on ideal level of involvement in care.

Nurses' cumulative scores were in the upper half of the possible range, indicating that the nurses generally claimed that they organised care to facilitate patient and family participation in care. High scores were significantly associated with senior grade, older age group and more professional qualifications.

Overall, patients and relatives obtained significantly higher scores on the ideal involvement than on the actual involvement in care subscales. Similarly, patients and relatives obtained higher scores on each of the 4 questions concerning ideal levels of involvement compared with their paired questions concerning actual involvement. This discrepancy between actual and ideal levels of involvement indicates that patients and relatives wanted more involvement than they actually had. High scores on the actual and ideal involvement subscales were significantly associated. This

indicates that patients and relatives who most wanted increased participation were those who had the greatest actual participation.

For both patients and relatives, high levels of current involvement were significantly associated with high scores for knowledge of diagnosis, tests and treatment. Relatives with high levels of current involvement also had more previous experience as hospital patients. Patients who most wanted increased involvement tended to be older. Relatives who most wanted increased involvement had been previously employed in hospitals.

Patients reported higher levels of current participation than relatives, but relatives expressed a stronger desire than patients for increased participation. There was a discrepancy between nurses' scores and those of patients and relatives. Patients' and relatives' perceptions of current levels of participation were lower than nurses' scores which implied that care was organised to permit patient and family participation.

Care activities in hospital (see Section 8.7)

All subjects were given a list of 20 basic nursing procedures. Nurses were asked whether patients or relatives could carry out each procedure. Patients and relatives were asked whether each of the care activities had been performed by a patient or relative.

Patients and relatives reported that significantly more care activities were carried out by patients than by relatives. Over two-thirds of the patients and half the relatives reported that relatives had carried out no care activities. Only an eighth of the patients and a third of the relatives reported that none of the care activities were carried out by the patient.

Overall, more nurses wrote that each activity could be done by a relative than either patients or relatives reported it done by relatives. On 15 of the 20 items more nurses indicated that the activity could be done by patients than patients or relatives reported it actually done. Generally, more nurses reported that 13 of the activities could be done by relatives rather than by patients, and the remaining 7 activities could be done by patients rather than by relatives.

None of the patients reported that relatives had filled in their fluid chart, given them a suppository, or inserted ear or eye drops. The activities which patients reported their relatives most frequently did were to tidy the bed and make the patient comfortable. Less than 5% of patients reported that they had tested their own urine, given themselves an injection, given themselves a suppository, put in ear or eye drops or taken their own temperature.

No relatives claimed to have filled in a fluid chart, taken the patient's pulse, tested the urine, given an injection, given a suppository or taken a temperature. None of the relatives reported that patients had ever taken their own pulse, given themselves an injection and inserted ear or eye drops. Nevertheless, at least some nurses claimed that all these activities could be carried out by patients and relatives. A third of relatives claimed to have tidied the bed and made the patient comfortable.

Patients who reported high levels of self-care and of relative-care tended to have more educational qualifications. Relatives who reported high levels of relative-care and patient self-care tended to be in the younger age groups.

More than 90% of nurses wrote that patients could dress and undress themselves and clean their mouth and teeth. More than 90% of nurses reported that relatives could help the patient to eat and drink and could brush the patient's hair. Less than 10% of nurses thought that patients could take their own temperature or pulse, or that relatives could take the patient's pulse.

Nursing process data (see Section 8.8)

Use of nursing process in wards (Sections 8.8.1 and 8.8.2)

The wards' NP scores were distributed across 57% of the possible distribution. None of the wards obtained scores in the top 29% of the possible distribution, indicating that none were using NP fully. There were approximately equal numbers of subjects in wards at various levels of NP usage. The use of NP had a negligible effect on practices and attitudes in relation to patient and family participation in care. Nurses in high scoring NP wards tended to have high scores on the patient implementation subscale of the main attitude scale and patients in high scoring wards tended to have higher scores on the patient planning subscale, but these trends were not statistically significant and of doubtful meaning.

Examination of the wards' scores on individual items revealed a consistent pattern. Highest scores were obtained for patient assessment and general points, suggesting that these aspects of NP were developed first and/or were easiest to implement and sustain. The next highest scores were for problem identification, care planning and planned nursing actions. The lowest scores were obtained for goal setting and evaluation, suggesting that they were introduced last and/or were most difficult to put into practice.

Nurses' familiarity with nursing process (Section 8.8.3)

These data were derived from 5 questions which produced a cumulative score.

High cumulative scores were significantly associated with senior grade and older age group. Most nurses had little familiarity with NP. More than half the ward-based nurses had worked for less than 2 months on NP wards. Nurse managers claimed more direct involvement with NP than ward-based nurses. Most nurses had read little about NP and more than a quarter claimed to have read nothing. This may be related to the finding that nearly half the nurses claimed they were not encouraged to read about NP. Attendance at relevant teaching sessions was patchy with a quarter of nurses claiming no teaching, but another quarter claiming to have attended several teaching sessions.

Nurses' attitudes towards the nursing process (see Section 8.8.4)

Nurses had generally positive attitudes towards NP, as shown by overall scores in the top half of the theoretically possible distribution. Although there were no statistically significant correlations between scores on this scale and other variables, nurses in senior grades tended to obtain the highest scores. NP was most frequently rated as having a "good" effect on 7 items, "no effect" on 2 items (the doctors' work and relatives' contentment and wellbeing) a "bad" effect on one item (time spent on paperwork) and "don't know" was scored most frequently on one item (sisters' job satisfaction).

Overall, NP was rated as having most beneficial effects on nurses' learning opportunities, the nurse-patient relationship and overall standards of care. NP was rated as having least beneficial effects on time spent on paperwork, the doctors' work and sisters' job satisfaction.

32 nurses also added comments. Those who expressed positive views about NP claimed that it improved nurses' learning, nurses' awareness of patients' needs, nurse-patient-relative communication, communication between hospital and community services, and that it made care more personal. Nurses who expressed negative opinions complained about laborious paperwork which had not been adapted to local needs, difficulties when wards were busy or understaffed, the distress for patients of long assessment interviews, and the lack of preparation for ward staff. Some commented that it was just new documentation and that practice remained the same. Neutral comments were that prejudices took time to overcome and that it was too early to evaluate the effects of change.

Official policies towards some nursing issues (see Section 8.9)

These open-ended questions concerning ward and unit policies and nurse training in relation to patient and family participation in planning and giving care were given to nurses only.

Ward and unit policies

Despite extensive comments by 92 nurses, no formal or informal policies were described, which suggests that none existed. There was little consensus about practice in relation to patient and family participation which seemed to vary according to nurses' personal opinions. Even within one ward a variety of practices were described and often conflicted with the opinions of the sister or NO, who appeared to exert little influence over ward practices. Senior nurses consistently expressed more positive attitudes and described practices more idealistically than juniors.

There was little indication that patients were encouraged to participate in care planning and the notion of relative participation in planning received even less support. Responses indicated that the idea was unfamiliar and often discouraged. In the section about patients assisting with their own care, there seemed to be agreement that patients were encouraged to be as independent as possible but that patient choice was limited. Relative participation in care seemed confined to simple tasks.

What nurses in training are taught

The pattern of responses indicated that little attention was given to these topics either in the school of nursing or during ward teaching. Nurses recalled little being taught about patient participation in care planning and thought that nothing was taught about the relatives' contribution to planning. There was general agreement that nurses were taught to encourage patients to do as much for themselves as possible. There was disagreement about relative participation in care giving, but most thought that nothing was taught. Many qualified nurses claimed no knowledge of what was taught to learners in the school of nursing.

Subjects' comments (see Sections 8.3.5, 8.4/5/6.2 and 8.7.5)

Comments written about the main attitude scale, the organisation/involvement in care scales and the care activities in hospital scales are summarised as a group. A larger proportion of nurses wrote comments on every scale; a very small proportion of patients and even fewer relatives chose to add comments.

Senior nurses wrote proportionately more comments than juniors and they tended to be more supportive of patient and family participation in care. Few nurses saw participation as having psycho-social benefits to patients and relatives, but judged it more by its convenience to staff, such as saving nurses' time. Many comments implied that nurses retained authority even if they chose, under certain circumstances, to delegate clearly defined tasks to patients and relatives. Many nurses commented on patients' and

relatives' inability to contribute sensibly to decision-making, how relatives interfere, and how patients feel neglected if not nurtured by nurses. Nurses were also cautious about risks of legal liability if anything went wrong. The importance of supervising patients and relatives when they did participate was repeatedly emphasised.

Patients and relatives wrote little that implied any awareness of the potential benefits to them of self-care or family participation. Like the nurses, they judged the value of participation in economic terms, such as reducing nurses' workload. Many implied that organisational constraints, such as the effects on the ward routine, were more important than individual patients or families. With few exceptions the patients' and relatives' comments, which were few in number, reflected a desire to conform to the staffs' expectations, to be cooperative, helpful and uncritical in order to be accepted by the staff. Several added that they would be happy to be more involved, but had never been asked to share in decision-making or given permission to carry out care procedures.

8.2 SAMPLE CHARACTERISTICS

(Percentages corrected to the nearest whole number)

8.2.1 Sample characteristics applicable to nurses, patients and relatives

Table 8.1 Sex

| | Nurses | Patients | Relatives |
|--------|------------|------------|-----------|
| male | 8 (8%) | 63 (55%) | 30 (42%) |
| female | 99 (92%) | 51 (45%) | 42 (58%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

There were more female relatives than male and more male patients than female. The small number of men in the nurses' sample approximates to the proportion of men in nursing.

Table 8.2 Age

| | Nurses | Patients | Relatives |
|---------|------------|------------|-----------|
| 18 - 34 | 89 (83%) | 32 (28%) | 22 (31%) |
| 35 - 51 | 12 (11%) | 22 (19%) | 22 (31%) |
| 52 - 68 | 6 (6%) | 60 (53%) | 28 (38%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

Nurses differed from patients and relatives in being younger. Relatives were fairly equally distributed across the three age groups, but more than half the patients were aged 52 or more.

Table 8.3 Marital status

| | Nurses | Patients | Relatives |
|--------------------------------|------------|------------|-----------|
| single | 80 (75%) | 33 (29%) | 11 (15%) |
| married | 24 (22%) | 58 (51%) | 55 (77%) |
| widowed, divorced or separated | 3 (3%) | 23 (20%) | 6 (8%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

Nurses were more likely to be unmarried than either patients or relatives, a finding possibly associated with their younger age.

Table 8.4 Educational qualifications

| | Nurses | Patients | Relatives |
|-------------------------|------------|------------|-----------|
| none or no answer | 11 (10%) | 76 (67%) | 41 (57%) |
| less than 4 'O' levels | 13 (12%) | 6 (5%) | 6 (8%) |
| 4 or more 'O' levels | 45 (42%) | 10 (9%) | 10 (14%) |
| diploma or 2 'A' levels | 32 (30%) | 9 (8%) | 8 (11%) |
| degree | 6 (6%) | 13 (11%) | 7 (10%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

Nurses had more educational qualifications than patients or relatives, with fewer nurses having no qualifications, although similar percentages held degrees.

Table 8.5 Professional and technical qualifications

| | Nurses | Patients | Relatives |
|-----------------------|------------|------------|-----------|
| none or no answer | 26 (24%) | 78 (68%) | 47 (65%) |
| technical (or SEN) | 8 (8%) | 19 (17%) | 10 (14%) |
| professional (or SRN) | 73 (68%) | 17 (15%) | 15 (21%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

To permit comparison across the three subject groups, SRN was coded as a professional qualification and SEN as a technical qualification. 69 nurses were SRNs or SENs, but 81 nurses described themselves as professionally or technically qualified because 12 trainee nurses had other qualifications. A higher percentage of patients and relatives than nurses were unqualified.

Table 8.6 Nationality

| | Nurses | Patients | Relatives |
|-----------------------------------------------------------|------------|------------|-----------|
| no answer | 1 (1%) | 0 (0%) | 0 (0%) |
| Oriental (from Malaysia, Hong Kong and Philippines) | 4 (4%) | 1 (1%) | 0 (0%) |
| African or West Indian | 9 (8%) | 5 (4%) | 1 (1%) |
| Asian (from India, Pakistan, Mauritius and Bangladesh) | 2 (2%) | 6 (5%) | 1 (1%) |
| European | 1 (1%) | 2 (2%) | 2 (3%) |
| Australian/North American | 2 (2%) | 0 (0%) | 0 (0%) |
| British | 88 (82%) | 100 (88%) | 68 (95%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

The data in Figure 8.6 were derived from two open-ended questions: "What is your nationality ? ..." and "Where were you born ?..." Responses were coded into one of the seven categories above. The validity of the data is uncertain: the topic is sensitive and people vary in how they describe themselves e.g. some families of foreign extraction with British citizenship describe themselves by their country of origin for several generations; others describe themselves as British.

Table 8.7 Hospital

| | Nurses | Patients | Relatives |
|------------|------------|------------|-----------|
| Hospital 1 | 49 (46%) | 55 (48%) | 35 (49%) |
| Hospital 2 | 58 (54%) | 59 (52%) | 37 (51%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

In each subject group there were slightly more subjects in H2 than H1.

Table 8.8 Type of ward

| | Nurses | Patients | Relatives |
|----------|------------|------------|-----------|
| medical | 49 (46%) | 57 (50%) | 37 (51%) |
| surgical | 34 (32%) | 57 (50%) | 35 (49%) |
| no ward | 24 (22%) | 0 (0%) | 0 (0%) |
| total | 107 (100%) | 114 (100%) | 72 (100%) |

There were approximately equal numbers of patients and relatives from medical and surgical wards. Of the ward based nurses, more were working in medical than in surgical wards. The 24 nurses coded as "no ward" were NO's and more senior.

8.2.2 Sample characteristics applicable to patients and relatives only

Table 8.9 Employment

| | Patients | Relatives |
|-----------------|------------|-----------|
| Works full time | 57 (50%) | 40 (56%) |
| Works part time | 11 (10%) | 8 (11%) |
| student | 4 (3%) | 0 (0%) |
| housewife | 18 (16%) | 14 (19%) |
| retired | 18 (16%) | 7 (10%) |
| unemployed | 6 (5%) | 3 (4%) |
| total | 114 (100%) | 72 (100%) |

Patients and relatives reported very similar patterns of employment, despite the sex differences between the two groups.

Table 8.10 Social class

| | Patients | Relatives |
|---------------------------------------------------|------------|-----------|
| no reply | 18 (16%) | 13 (18%) |
| professional and upper managerial (Class I) | 8 (7%) | 2 (4%) |
| semi-professional and lower managerial (Class II) | 23 (20%) | 21 (28%) |
| skilled workers (Class III) | 39 (34%) | 22 (31%) |
| semi-skilled workers (Class IV) | 11 (10%) | 9 (12%) |
| unskilled workers (Class V) | 15 (13%) | 5 (7%) |
| total | 114 (100%) | 72 (100%) |

The Registrar General's Classification of Occupations (Office of Population Censuses and Surveys, 1970) was used to divide patients and relatives into five social classes. The data were derived from four open-ended questions: "If working, please name your job ...", "Please describe your duties in your job...", "If you have a spouse who is working, please name his/her job..." and "If you have a spouse who is working please describe his/her duties in the job...".

Men were classified according to their own job and women according to their own or husband's occupation, whichever was higher. Patients and relatives had a similar social class distribution. There was a high rate of non-response (16% and 18%) to these questions from both subject groups, some of whom were unemployed or retired. No attempt was made to code nurses' social class because the Registrar General classifies all nurses as Social Class II. Therefore the data concerning the nurses' grade

(Table 8.15), educational qualifications (Table 8.4) and professional qualifications (Table 8.5) provide much finer discriminations.

Table 8.11 Number of previous hospital admissions

| | Patients | Relatives |
|-------------------|------------|-----------|
| no answer | 3 (3%) | 3 (4%) |
| never | 20 (17%) | 19 (26%) |
| once | 15 (13%) | 13 (18%) |
| 2 or 3 times | 27 (24%) | 22 (31%) |
| more than 3 times | 49 (43%) | 15 (21%) |
| total | 114 (100%) | 72 (100%) |

The relatives had fewer admissions to hospital than the patients. Nevertheless, more than half the relatives had been hospital patients at least two or three times.

Table 8.12 Employment in hospitals

| | Patients | Relatives |
|-------|------------|-----------|
| yes | 18 (16%) | 9 (13%) |
| no | 96 (84%) | 63 (87%) |
| total | 114 (100%) | 72 (100%) |

Patients and relatives were asked if they had ever worked in a hospital and if so for how long and in what capacity. These questions were intended as additional indicators of familiarity with the hospital environment. Roughly equal proportions of patients and relatives had worked in hospitals.

Table 8.13 Worry about the patient's current admission to hospital

| | Patients | Relatives |
|--------------------|------------|-----------|
| not at all worried | 46 (40%) | 10 (14%) |
| slightly worried | 29 (26%) | 16 (22%) |
| moderately worried | 15 (13%) | 16 (22%) |
| very worried | 24 (21%) | 30 (42%) |
| total | 114 (100%) | 72 (100%) |

From the 4 categories above patients and relatives were asked to tick the box which best summed up how they felt about (their relative) coming into hospital this time. Relatives expressed a much higher level of concern than patients.

Table 8.14 Knowledge about the patient's diagnosis, treatment and tests

| | | Patients | Relatives |
|---------------------------------|---------|------------|-----------|
| no knowledge or no answer | score 0 | 3 (3%) | 6 (8%) |
| ↓ | score 1 | 1 (1%) | 0 (0%) |
| | score 2 | 11 (10%) | 11 (15%) |
| | score 3 | 14 (12%) | 8 (11%) |
| | score 4 | 31 (27%) | 14 (20%) |
| | score 5 | 24 (21%) | 14 (20%) |
| accurate and complete knowledge | score 6 | 30 (26%) | 19 (26%) |
| total | | 114 (100%) | 72 (100%) |

Scores were derived from 2 questions: "What tests and treatment are you (is your relative) having during your (his/her) stay in hospital ?..." and "What are you (is your relative) suffering from ? ... " . Answers to each question were scored by the researcher:

3. accurate and complete knowledge
2. some correct knowledge
1. incorrect information given
0. no answer or no knowledge

Scores from the two questions were added to produce a possible range of scores from 0 to 6. There were no differences between patients and relatives in the amount of knowledge as shown by their answers to these questions.

8.2.3 Sample characteristics applicable to one group of subjects only

Table 8.15 Nurses' grade

| Grade | number | percentage |
|---------------------------------|--------|------------|
| learner | 37 | 35 |
| sister, staff or enrolled nurse | 45 | 42 |
| nursing officer or above | 24 | 22 |
| missing value | 1 | 1 |
| total | 107 | 100% |

It was originally hoped to have one third of nurses from each of the three grades above. However, because of difficulty in finding enough NO's with responsibility for general wards, that grade is under-represented in the sample and ward-based qualified nurses are correspondingly over-represented.

Table 8.16Relative's relationship to patient

| Relationship | number | percentage |
|------------------------------|--------|------------|
| spouse | 38 | 53 |
| son or daughter | 9 | 12.5 |
| parent | 7 | 10 |
| brother or sister | 7 | 10 |
| aunt or uncle | 1 | 1 |
| nephew or niece | 1 | 1 |
| friend or other relationship | 9 | 12.5 |
| total | 72 | 100% |

More than half the relatives were a patient's spouse. The other most frequent relationships were son, daughter and friend.

Table 8.17Duration of relatives' journey to the hospital

| Duration of journey | number | percentage |
|----------------------|--------|------------|
| less than 30 minutes | 32 | 44 |
| 30 - 60 minutes | 21 | 29 |
| more than an hour | 19 | 27 |
| total | 72 | 100% |

More than half the relatives travelled for more than half an hour to reach the hospital. This could have some relevance to the frequency of visits and amount of relative participation in care.

8.2.4 Sample characteristics - cross tabulations

Cross tabulations revealed several statistically significant findings:

Table 8.18

Summary of statistically significant cross-tabulations of sample characteristics, using chi square statistic

| sample characteristics cross-tabulated | χ^2 | df | p |
|----------------------------------------------------------|----------------------------------------------------|----|------|
| <u>Nurses:</u> | | | |
| age x educational qualifications | 19.14 | 8 | .014 |
| nationality x educational qualifications | 39.72 | 24 | .023 |
| nationality x hospital | 12.32 | 6 | .055 |
| hospital x educational qualifications | 31.09 | 4 | .000 |
| <u>Patients:</u> | | | |
| knowledge of illness x social class | 44.52 | 30 | .043 |
| knowledge of illness x number of previous admissions | 73.09 | 24 | .000 |
| knowledge of illness x educational qualifications | χ^2 not significant Kendall's r .25 p .001 | | |
| social class x educational qualifications | 119.05 | 20 | .000 |
| social class x professional qualifications | 74.95 | 10 | .000 |
| <u>Relatives:</u> | | | |
| knowledge of illness x number of previous admissions | - | - | <.05 |
| knowledge of illness x educational qualifications | 36.85 | 20 | .012 |
| knowledge of illness x professional qualifications | 25.26 | 10 | .005 |
| social class x educational qualifications | 60.98 | 24 | .000 |
| social class x professional qualifications | 25.15 | 12 | .014 |
| age x educational qualifications | 15.75 | 8 | .046 |
| age x professional qualifications | 10.06 | 4 | .039 |
| educational qualifications x professional qualifications | 51.76 | 8 | .000 |

Nurses

Younger nurses had more educational qualifications than older nurses.

British nurses had more educational qualifications than non-British nurses and there were more non-British nurses at H1 than H2. Nurses at H2 tended to have more educational qualifications than those at H1.

Patients

A higher score for knowledge about diagnosis, tests and treatment was

significantly associated with higher social class, more previous admissions to hospital and more educational qualifications. Higher social class was significantly associated with more educational and more professional qualifications.

Relatives

A higher score for knowledge about the patient's diagnosis, tests and treatment was significantly associated with more previous admissions to hospital, more educational and more professional qualifications. Higher social class was associated with more educational and more professional qualifications. Younger relatives had more educational and more professional qualifications than older relatives.

8.2.5 Comparisons among the three groups

Nurses differed from patients and relatives in being younger, more women, less likely to be married, and having more educational and more professional qualifications. One way ANOVA with group as the dependent variable revealed significant differences among groups for age (f 55.78 p .000), marital status (f 37.64 p .000), educational (f 24.37 p .000) and professional qualifications (f 46.37 p .000).

8.2.6 Patients' questionnaires completed by researcher

13 out of 114 patients' questionnaires (11.4%) were completed by the researcher at the request of the patients. These patients were characterised by the relative chronicity or stability of their mainly medical conditions and included 2 patients with multiple sclerosis, 2 with arthritis of the hands, 3 with general weakness, 4 with wrists, shoulders or fingers in plaster of paris and 2 with missing spectacles. It is possible that some of these patients were illiterate or semi-literate, although there was no evidence of this.

Because of the risk of bias associated with this procedure these data were analysed separately. 10 of these patients were female, 11 were aged over 52, and 5 had previously worked in hospitals, all of which were significantly higher proportions than the rest of the patients. Other cross-tabulations revealed no systematic differences from the other patients.

Table 8.19. Questionnaires completed by researcher: summary of significant cross-tabulations.

| forms completed by patient or researcher | χ^2 | df | p |
|------------------------------------------|----------|----|------|
| x age group | 7.09 | 2 | .029 |
| x sex | 7.36 | 2 | .025 |
| x previous hospital job | 3.91 | 1 | .048 |

8.3 ATTITUDES TOWARDS PATIENT AND FAMILY PARTICIPATION IN CARE

This scale was identical for all subjects. The 24 items were scored from 0 to 5, so that high scores indicated a positive attitude towards the issues. Cumulative scores were computed for each subject, giving a possible range from 0 to 120. "Don't know" scored 3 and "no answer" scored 0.

8.3.1 Data from nurses (n = 107)

Table 8.20 shows the number and percentage of nurses who responded in each category for each item. The mean score and standard deviation for each item are also shown. It can be seen that most of the response categories were used. Excluding the "no answer" category, 103 of the 120 available categories (85.8%) were used, indicating a broad spread of attitudes. Items with the highest mean scores were Numbers 8, 9, 12 and 20. Items with the lowest mean scores were Numbers 1, 6, 14 and 24.

Table 8.20

Distribution of nurses' responses to each attitude item (n = 107).

See overleaf (pp. 212, 213).

Table 8.20. Distribution of nurses' responses to each attitude item (n = 107)

| item number | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | mean score | standard deviation |
|-------------|-----|-----|--------|------|--------|------|-----|-----|--------|------|--------|------|------------|--------------------|
| | no. | % | number | % | number | % | no. | % | number | % | number | % | | |
| 1 | 0 | 0 | 9 | 8.4 | 52 | 48.6 | 2 | 1.9 | 39 | 36.4 | 5 | 4.7 | 2.8 | 1.16 |
| 2 | 2 | 1.9 | 1 | .9 | 11 | 10.3 | 5 | 4.7 | 65 | 60.7 | 23 | 21.5 | 3.86 | 1.02 |
| 3 | 0 | 0 | 1 | .9 | 12 | 11.2 | 0 | 0 | 48 | 44.9 | 46 | 43 | 4.18 | .97 |
| 4 | 0 | 0 | 2 | 1.9 | 15 | 14 | 7 | 6.5 | 59 | 55.1 | 24 | 22.4 | 3.82 | .99 |
| 5 | 0 | 0 | 0 | 0 | 1 | .9 | 4 | 3.7 | 60 | 56.1 | 42 | 39.3 | 4.33 | .59 |
| 6 | 0 | 0 | 35 | 32.7 | 51 | 47.7 | 8 | 7.5 | 11 | 10.3 | 2 | 1.9 | 2.0 | .99 |
| 7 | 0 | 0 | 2 | 1.9 | 2 | 1.9 | 0 | 0 | 46 | 43 | 57 | 53.3 | 4.43 | .77 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1.9 | 31 | 29 | 74 | 69.2 | 4.67 | .51 |
| 9 | 0 | 0 | 1 | 0.9 | 0 | 0 | 1 | 0.9 | 25 | 23.4 | 80 | 74.8 | 4.71 | .58 |
| 10 | 0 | 0 | 3 | 2.8 | 12 | 11.2 | 2 | 1.9 | 71 | 66.4 | 19 | 17.8 | 3.85 | .94 |
| 11 | 0 | 0 | 0 | 0 | 7 | 6.5 | 6 | 5.6 | 57 | 53.3 | 37 | 34.6 | 4.16 | .8 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 46.7 | 57 | 53.3 | 4.53 | .50 |

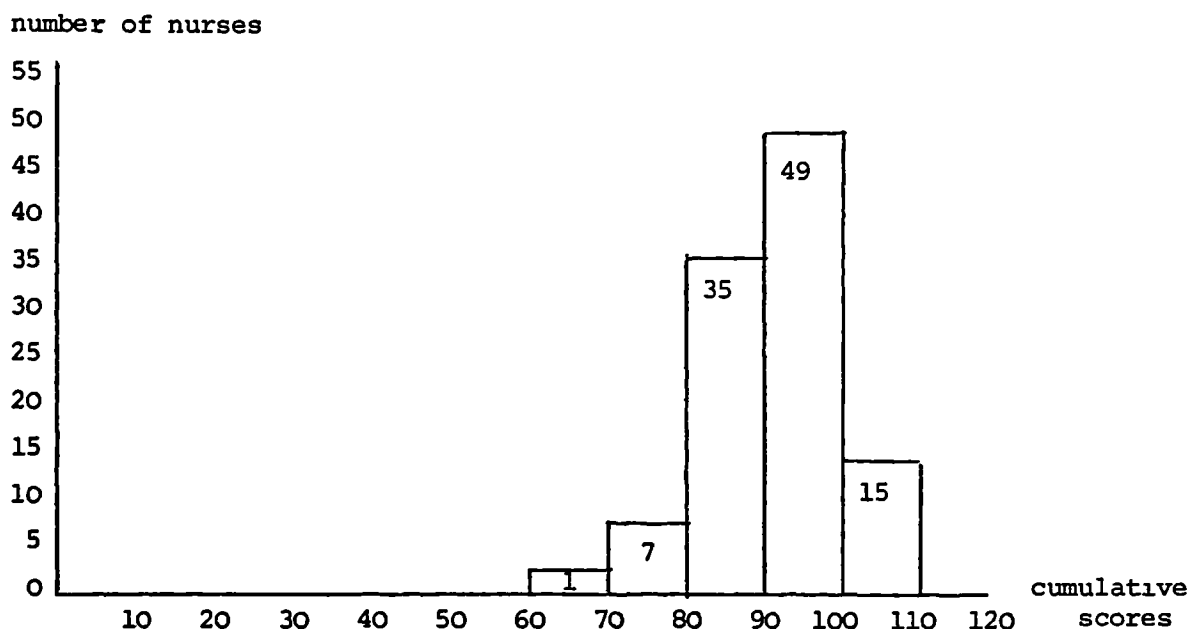
Table 8.20 (cont'd)

| item number | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | mean score | standard deviation |
|-------------|-----|----|--------|-----|----------------|------|-----|------|----------------|------|--------|------|------------|--------------------|
| | no. | % | number | % | number | % | no. | % | number | % | number | % | | |
| 13 | 0 | 0 | 2 | 1.9 | agree 13 | 12.1 | 14 | 13.1 | disagree 64 | 59.8 | 14 | 13.1 | 3.7 | .91 |
| 14 | 1 | .9 | 5 | 4.7 | agree 55 | 51.4 | 9 | 8.4 | disagree 34 | 31.8 | 3 | 2.8 | 2.73 | 1.08 |
| 15 | 0 | 0 | 5 | 4.7 | agree 5 | 4.7 | 2 | 1.9 | disagree 59 | 55.1 | 36 | 33.6 | 4.08 | .98 |
| 16 | 0 | 0 | 5 | 4.7 | agree 31 | 29 | 12 | 11.2 | disagree 54 | 50.5 | 5 | 4.7 | 3.22 | 1.06 |
| 17 | 1 | .9 | 5 | 4.7 | disagree 18 | 16.8 | 6 | 5.6 | agree 65 | 60.7 | 12 | 11.2 | 3.54 | 1.1 |
| 18 | 0 | 0 | 5 | 4.7 | agree 29 | 27.1 | 8 | 7.5 | disagree 55 | 51.4 | 10 | 9.3 | 3.34 | 1.16 |
| 19 | 0 | 0 | 0 | 0 | disagree 1 | .9 | 3 | 2.8 | agree 57 | 53.3 | 46 | 43 | 4.38 | .59 |
| 20 | 0 | 0 | 0 | 0 | disagree 0 | 0 | 0 | 0 | agree 34 | 31.8 | 73 | 68.2 | 4.68 | .47 |
| 21 | 0 | 0 | 9 | 8.4 | agree 25 | 23.4 | 11 | 10.3 | disagree 52 | 48.6 | 10 | 9.3 | 3.27 | 1.17 |
| 22 | 0 | 0 | 0 | 0 | disagree 4 | 3.7 | 0 | 0 | agree 42 | 39.3 | 61 | 57 | 4.49 | .69 |
| 23 | 0 | 0 | 0 | 0 | disagree 5 | 4.7 | 3 | 2.8 | agree 47 | 43.9 | 52 | 48.6 | 4.36 | .76 |
| 24 | 0 | 0 | 10 | 9.3 | agree 67 | 62.6 | 8 | 7.5 | disagree 20 | 18.7 | 2 | 1.9 | 2.41 | .96 |

8.3.1.1 Cumulative scores for the whole scale and subscale

Figure 8.1

Distribution of cumulative scores for each nurse on the whole attitude scale, blocked in multiples of 10

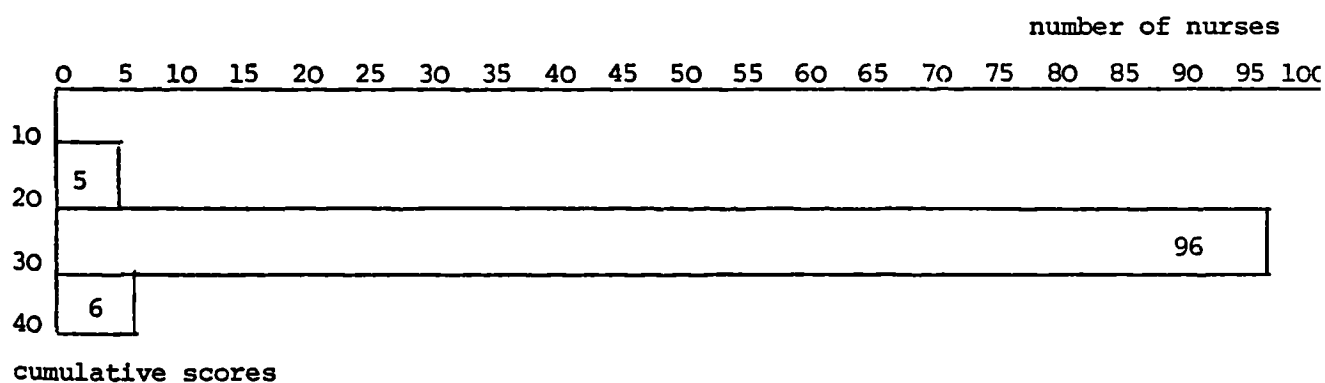


n = 107 total scores - derived from 24 items
 possible range 0 - 120 actual range 64 - 109
 mean 91.49 standard deviation 8.27

Cumulative scores for the four subscales were computed, the distributions of which are shown in figures 8.2 to 8.5

Figure 8.2

Distribution of cumulative scores for each nurse, on the "patient planning" subscale, blocked in multiples of 10.

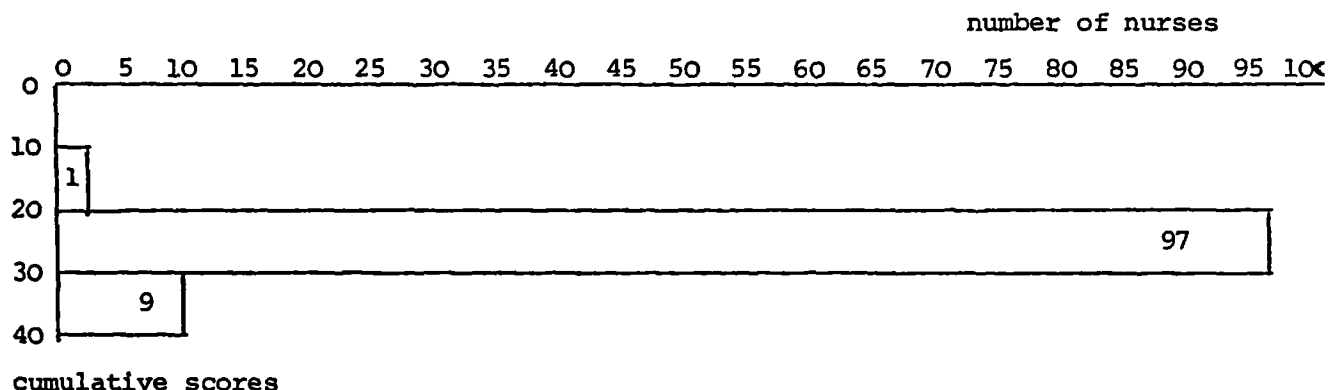


n = 107 total scores - derived from 7 items
 possible range 0 - 35 actual range 12 - 33
 mean 24.48 standard deviation 3.59

High scores on this subscale were significantly associated with H2,
 (χ^2 29.41 with 17 df, p .031).

Figure 8.3

Distribution of cumulative scores for each nurse, on the "patient implementation" subscale, blocked in multiples of 10.

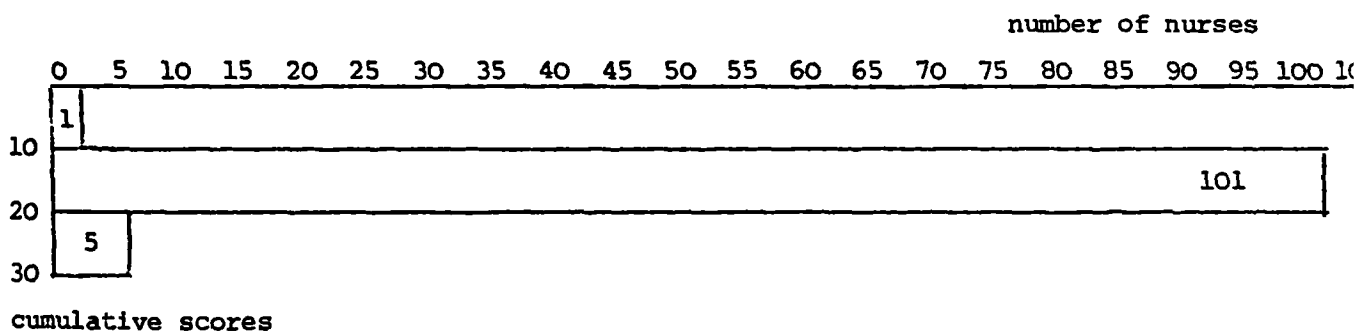


n = 107 total scores - derived from 7 items
 possible range 0 - 35 actual range 18 - 33
 mean 25.72 standard deviation 2.83

There were no significant correlations between scores on this and any other variables.

Figure 8.4

Distribution of cumulative scores for each nurse on the "relative planning" subscale, blocked in multiples of 10.

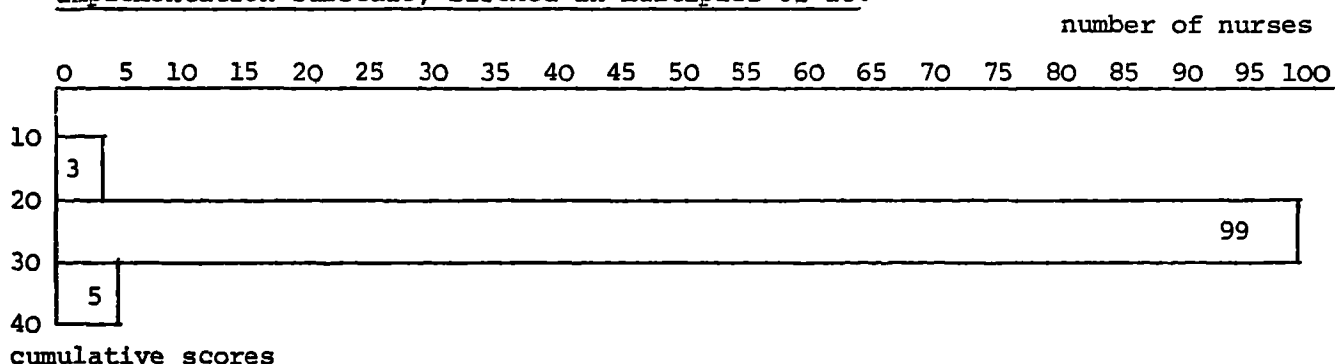


n = 107 total scores - derived from 4 items
 possible range 0 - 20 actual range 9 - 20
 mean 16.14 standard deviation 2.29

High scores on this subscale were significantly associated with the possession of professional nursing qualifications (χ^2 35.64, with 24 df, p .059) and H2 (χ^2 22.251 with 12 df, p .035).

Figure 8.5

Distribution of cumulative scores for each nurse on the "relative implementation" subscale, blocked in multiples of 10.



n = 107 total scores derived from 6 items
 possible range 0 - 30 actual range 17 - 30
 mean 25.15 standard deviation 2.66

There were no significant associations between scores on this and any other variables.

There were statistically significant correlations (at $p < .05$) among all 4 subscales, which were discussed in section 7.4.2.1.

8.3.1.2 Subsidiary data on nurses' attitudes towards patient and family participation in care

These data were derived from a class exercise carried out in December 1984/ January 1985 and described in Section 7.2. Subjects were 34 nurses from 8 different hospitals in London and South East England.

Sample characteristics

Sex: 9 male; 25 female

Age: 31 aged 18 - 34; 3 aged 35 - 51.

Educational qualifications: 8 had four or more 'O' levels; 26 had 'A' levels, diploma or degree.

Grade: 3 learners; 24 sisters, SN's or SEN's; 7 NO's or above.

Table 8.21

Areas of work (listed in order of frequency).

| area | number of nurses |
|-----------------------|------------------|
| medical ward..... | 6 |
| oncology | 5 |
| psychiatry | 5 |
| mental handicap | 5 |
| research nurse | 4 |
| nurse tutor | 2 |
| community | 2 |
| students in block ... | 2 |
| breast unit | 2 |
| theatres | 1 |
| total | 34 |

It can be seen that typical subjects were women aged between 18 and 34, educated to 'A' level standard, and working as qualified nurses in medical, oncology, psychiatric and mental handicap clinical areas.

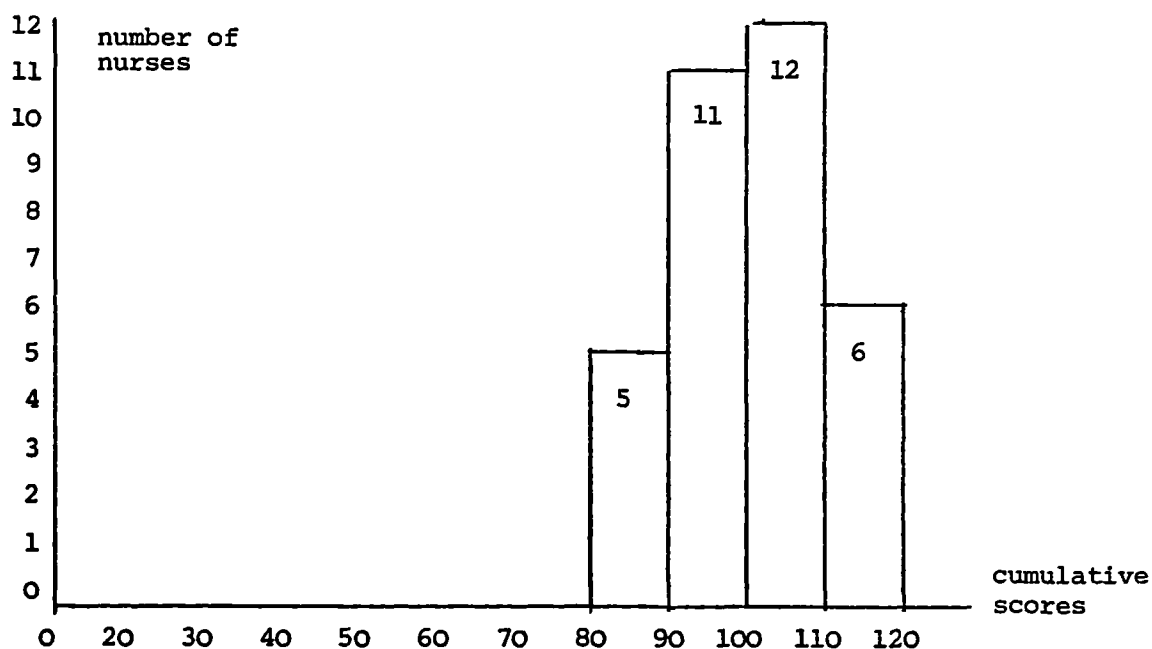
Table 8.22

Mean score, total score, range and standard deviation for each item in the attitude scale

| Item | mean score | total score | range | standard deviation |
|------|------------|-------------|-------|--------------------|
| 1 | 3.06 | 104 | 2 - 5 | 1.18 |
| 2 | 4.26 | 145 | 2 - 5 | 0.83 |
| 3 | 3.97 | 135 | 1 - 5 | 1.14 |
| 4 | 4.32 | 147 | 2 - 5 | 0.64 |
| 5 | 4.47 | 152 | 4 - 5 | 0.51 |
| 6 | 3.41 | 116 | 1 - 5 | 1.28 |
| 7 | 4.65 | 158 | 1 - 5 | 0.77 |
| 8 | 4.68 | 159 | 4 - 5 | 0.47 |
| 9 | 4.65 | 158 | 1 - 5 | 0.77 |
| 10 | 4.15 | 141 | 2 - 5 | 1.02 |
| 11 | 4.26 | 145 | 2 - 5 | 0.93 |
| 12 | 4.59 | 156 | 4 - 5 | 0.66 |
| 13 | 4.09 | 139 | 2 - 5 | 0.67 |
| 14 | 3.56 | 121 | 1 - 5 | 1.11 |
| 15 | 4.35 | 148 | 1 - 5 | 0.81 |
| 16 | 4.00 | 136 | 2 - 5 | 0.78 |
| 17 | 4.09 | 139 | 1 - 5 | 0.93 |
| 18 | 4.06 | 138 | 2 - 5 | 0.92 |
| 19 | 4.35 | 148 | 1 - 5 | 0.81 |
| 20 | 4.44 | 151 | 1 - 5 | 0.78 |
| 21 | 4.26 | 145 | 2 - 5 | 0.90 |
| 22 | 4.44 | 151 | 3 - 5 | 0.56 |
| 23 | 4.56 | 155 | 4 - 5 | 0.50 |
| 24 | 2.85 | 97 | 1 - 5 | 1.08 |

Figure 8.6

Distribution of total scores for each subject on the attitude scale, blocked in multiples of 10.



Total scores for each subject were derived from scores of 0 to 5 for each of 24 items, giving a possible range from 0 to 120. For simplicity the histogram shows the total scores blocked in multiples of ten. The actual range was 81 to 116, mean 99.59 and standard deviation 9.78. The distribution was skewed towards the upper range of scores, although there was no "ceiling effect".

Table 8.23

Relationship between nurses' educational qualifications and attitude scores

| educational qualifications | score on attitude scale | | | | total |
|-------------------------------|-------------------------|-------|---------|---------|--------|
| | 80-89 | 90-99 | 100-109 | 110-119 | |
| 4 or more 'O' levels | 4 | 2 | 2 | 0 | 8 |
| 'A' levels, diploma or degree | 1 | 9 | 10 | 6 | 26 |
| total | 5 | 11 | 12 | 6 | n = 34 |

χ^2 test on data collapsed into 4 cells: χ^2 3.278 with 1 df, $p < .10$ but $> .05$ not significant.

Table 8.24

Relationship between nurses' sex and attitude scores

| sex | score on attitude scale | | | | total |
|--------|-------------------------|-------|---------|---------|--------|
| | 80-89 | 90-99 | 100-109 | 110-119 | |
| male | 1 | 4 | 2 | 2 | 9 |
| female | 4 | 7 | 10 | 4 | 25 |
| total | 5 | 11 | 12 | 6 | n = 34 |

χ^2 test on data collapsed into 4 cells: χ^2 4.24 with 1 df. not significant.

Table 8.25

Relationship between nurses' areas of work and attitude scores

| area of work | score on attitude scale | | | | |
|-------------------------|-------------------------|-------|---------|---------|--------|
| | 80-89 | 90-99 | 100-109 | 110-119 | total |
| medical ward | 1 | 2 | 2 | 1 | 6 |
| oncology | 0 | 2 | 3 | 0 | 5 |
| psychiatry | 2 | 2 | 1 | 0 | 5 |
| mental handicap | 1 | 1 | 1 | 2 | 5 |
| research nurse | 0 | 0 | 1 | 3 | 4 |
| nurse tutor | 0 | 1 | 1 | 0 | 2 |
| community | 0 | 1 | 1 | 0 | 2 |
| students in block | 0 | 1 | 1 | 0 | 2 |
| breast unit | 0 | 1 | 1 | 0 | 2 |
| theatres | 1 | 0 | 0 | 0 | 1 |
| total | 5 | 11 | 12 | 6 | n = 34 |

Research nurses and mental handicap nurses obtained the highest scores. Lowest scores were obtained by psychiatric nurses. However most groups were too small to permit meaningful comparisons.

Table 8.26

Relationship between nurses' grade and attitude scores

| nurses' grade | score on attitude scale | | | | |
|---------------------------------------|-------------------------|-------|---------|---------|--------|
| | 80-89 | 90-99 | 100-109 | 110-119 | total |
| learner | 1 | 1 | 1 | 0 | 3 |
| sister, staff or enrolled nurse | 4 | 9 | 6 | 5 | 24 |
| nursing officer or above | 0 | 1 | 5 | 1 | 7 |
| total | 5 | 11 | 12 | 6 | n = 34 |

Expected cell frequencies were too small to use the χ^2 test, even with collapsed cells. Inspection of the table suggests that qualified nurses obtained higher scores than learners, and NO's seemed to obtain a greater proportion of high scores than other qualified nurses.

8.3.2 Data from patients (n = 114)

Table 8.27 shows the number and percentage of patients who responded in each category for each item. The mean score and standard deviation for each item are also shown. It can be seen that most of the response categories were used. Excluding the "no answer" category, 115 of the 120 available categories (92.5%) were used, indicating a broad spread of attitudes. Items with the highest mean scores were Numbers 3, 8, 11, 12 and 20. Items with the lowest mean scores were Numbers 1, 6, 14, 16 and 21.

Table 8.27

Distribution of patients' responses to each attitude item (n = 114)

See overleaf (pp. 220, 221).

Table 8.27 Distribution of patients' responses to each attitude item (n = 114)

| item number | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | mean score | standard deviation |
|-------------|-----|-----|--------|------|-------------|------|-----|------|-------------|------|--------|------|------------|--------------------|
| | no. | % | number | % | number | % | no. | % | number | % | number | % | | |
| 1 | 0 | 0 | 36 | 31.6 | agree 66 | 57.9 | 3 | 2.6 | disagree 7 | 6.1 | 2 | 1.8 | 1.89 | .86 |
| 2 | 1 | .9 | 2 | 1.8 | disagree 12 | 10.5 | 12 | 10.5 | agree 65 | 57 | 22 | 19.3 | 3.79 | .99 |
| 3 | 0 | 0 | 3 | 2.6 | disagree 11 | 9.6 | 2 | 1.8 | agree 51 | 44.7 | 47 | 41.2 | 4.12 | 1.02 |
| 4 | 1 | .9 | 6 | 5.3 | disagree 19 | 16.7 | 12 | 10.5 | agree 51 | 44.7 | 25 | 21.9 | 3.59 | 1.2 |
| 5 | 2 | 1.8 | 2 | 1.8 | disagree 17 | 14.9 | 10 | 8.8 | agree 56 | 49.1 | 27 | 23.7 | 3.73 | 1.14 |
| 6 | 1 | .9 | 45 | 39.5 | disagree 43 | 37.7 | 7 | 6.1 | agree 11 | 9.6 | 7 | 6.1 | 2.03 | 1.2 |
| 7 | 0 | 0 | 8 | 7 | agree 23 | 20.2 | 5 | 4.4 | disagree 47 | 41.2 | 31 | 27.2 | 3.61 | 1.27 |
| 8 | 2 | 1.8 | 1 | .9 | disagree 3 | 2.6 | 1 | .9 | agree 69 | 60.5 | 38 | 33.3 | 4.17 | .88 |
| 9 | 1 | .9 | 1 | .9 | disagree 6 | 5.3 | 7 | 6.1 | agree 69 | 60.5 | 30 | 26.3 | 4.03 | .87 |
| 10 | 0 | 0 | 16 | 14 | disagree 42 | 36.8 | 9 | 7.9 | agree 38 | 33.3 | 9 | 7.9 | 2.84 | 1.25 |
| 11 | 0 | 0 | 4 | 3.5 | disagree 7 | 6.1 | 8 | 7 | agree 44 | 38.6 | 51 | 44.7 | 4.15 | 1.03 |
| 12 | 0 | 0 | 2 | 1.8 | disagree 2 | 1.8 | 0 | 0 | agree 69 | 60.5 | 41 | 36 | 4.27 | .72 |

Table 8.27 (cont.)

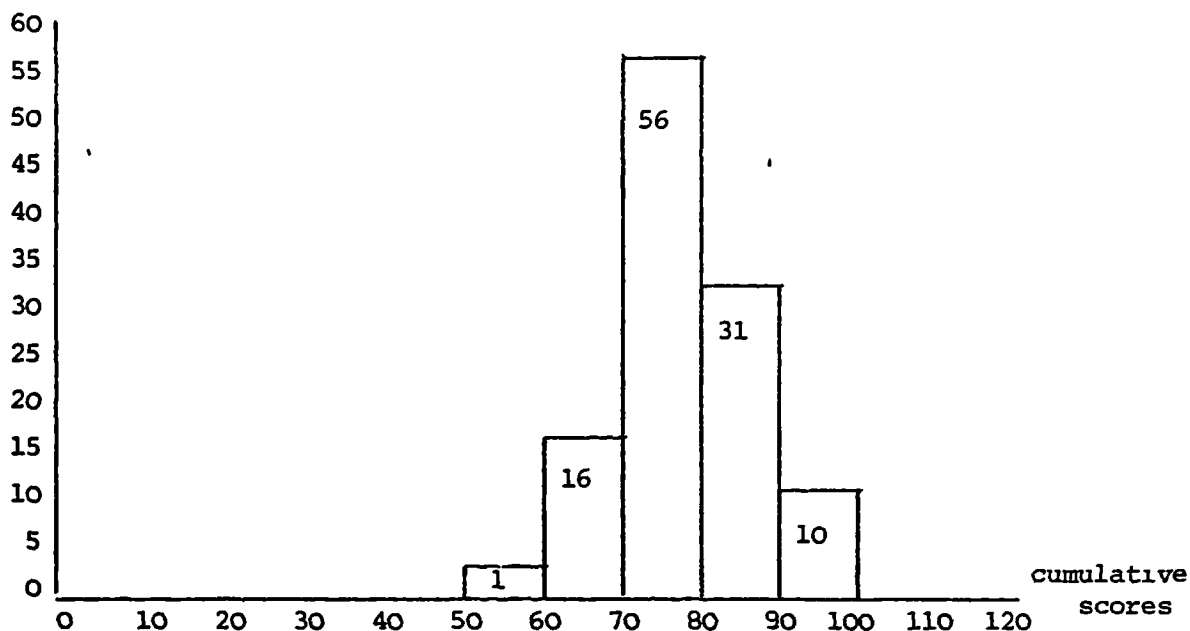
| item number | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | mean score | standard deviation |
|-------------|-------------|-----|------------------------------|------|---------------------|------|--------------|------|---------------------|------|------------------------------|------|------------|--------------------|
| | (no answer) | | (strongly agree or disagree) | | (agree or disagree) | | (don't know) | | (agree or disagree) | | (strongly agree or disagree) | | | |
| | no. | % | number | % | number | % | no. | % | number | % | number | % | | |
| 13 | 3 | 2.6 | 9 | 7.9 | agree 31 | 27.2 | 12 | 10.5 | disagree 45 | 39.5 | 14 | 12.3 | 3.13 | 1.3 |
| 14 | 0 | 0 | 22 | 19.3 | agree 68 | 59.6 | 8 | 7 | disagree 14 | 12.3 | 2 | 1.8 | 2.17 | .94 |
| 15 | 1 | .9 | 14 | 12.3 | agree 51 | 44.7 | 4 | 3.5 | disagree 33 | 28.9 | 11 | 9.6 | 2.76 | 1.2 |
| 16 | 0 | 0 | 30 | 26.3 | agree 65 | 57 | 12 | 10.5 | disagree 7 | 6.1 | 0 | 0 | 1.96 | .78 |
| 17 | 1 | .9 | 13 | 11.4 | disagree 25 | 21.9 | 6 | 5.3 | agree 57 | 50 | 12 | 10.5 | 3.24 | 1.28 |
| 18 | 0 | 0 | 21 | 18.4 | agree 64 | 56.1 | 10 | 8.8 | disagree 14 | 12.3 | 5 | 4.4 | 2.28 | 1.04 |
| 19 | 1 | .9 | 2 | 1.8 | disagree 9 | 7.9 | 7 | 6.1 | agree 66 | 57.9 | 29 | 25.4 | 3.95 | .97 |
| 20 | 1 | .9 | 0 | 0 | disagree 6 | 5.3 | 7 | 6.1 | agree 57 | 50 | 43 | 37.7 | 4.17 | .87 |
| 21 | 1 | .9 | 34 | 29.8 | agree 47 | 41.2 | 9 | 7.9 | disagree 18 | 15.8 | 5 | 4.4 | 2.21 | 1.18 |
| 22 | 0 | 0 | 0 | 0 | disagree 7 | 6.1 | 8 | 7 | agree 68 | 59.6 | 31 | 27.2 | 4.07 | .77 |
| 23 | 1 | .9 | 0 | 0 | disagree 8 | 7 | 14 | 12.3 | agree 62 | 54.4 | 29 | 25.4 | 3.96 | .89 |
| 24 | 0 | 0 | 20 | 17.5 | agree 66 | 57.9 | 11 | 9.6 | disagree 15 | 13.2 | 2 | 1.8 | 2.24 | .95 |

8.3.2.1 Cumulative scores for the whole scale and 4 subscales

Figure 8.7

Distribution of cumulative scores for each patient on the whole attitude scale, blocked in multiples of 10.

number of patients



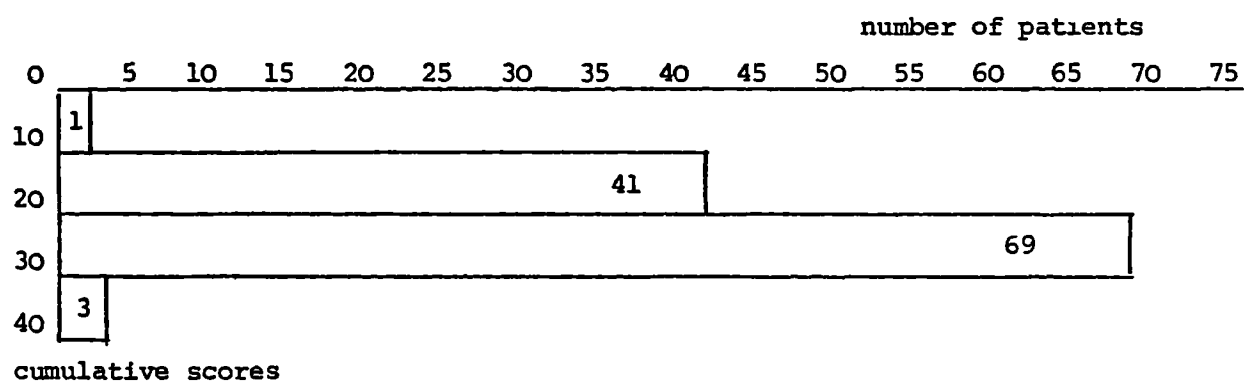
n = 114 total scores derived from 24 items
possible range 0 - 120 actual range 57 - 99
mean 78.34 standard deviation 8.59

Subjects with high overall scores tended to have more professional qualifications (χ^2 91.71 with 72 df, p .056).

Cumulative scores for the 4 sub-scales were computed, the distributions of which are shown in Figures 8.8 to 8.11.

Figure 8.8

Distribution of cumulative scores for each patient on the "patient planning" subscale, blocked in multiples of 10.



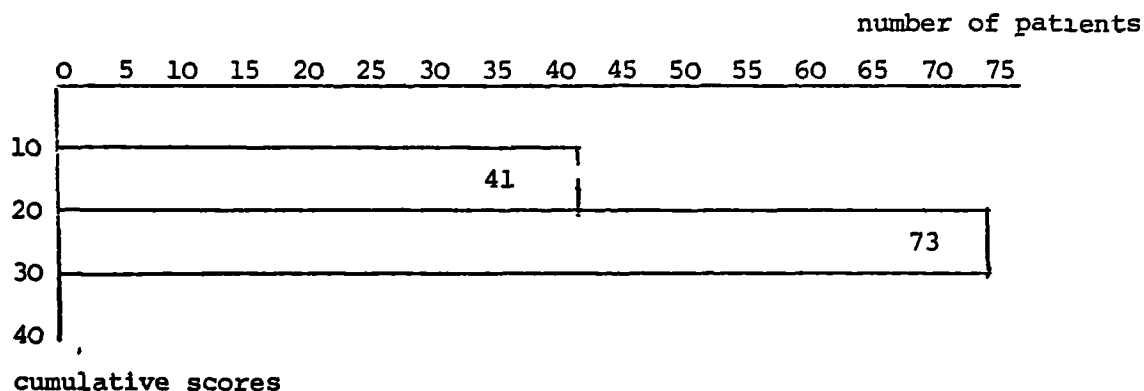
cumulative scores

n = 114 total scores derived from 7 items
possible range 0 - 35 actual range 9 - 31
mean 21.74 standard deviation 4.00.

High scores on this subscale were not significantly correlated with scores on any other variables.

Figure 8.9

Distribution of cumulative scores for each patient on the "patient implementation" subscale, blocked in multiples of 10.

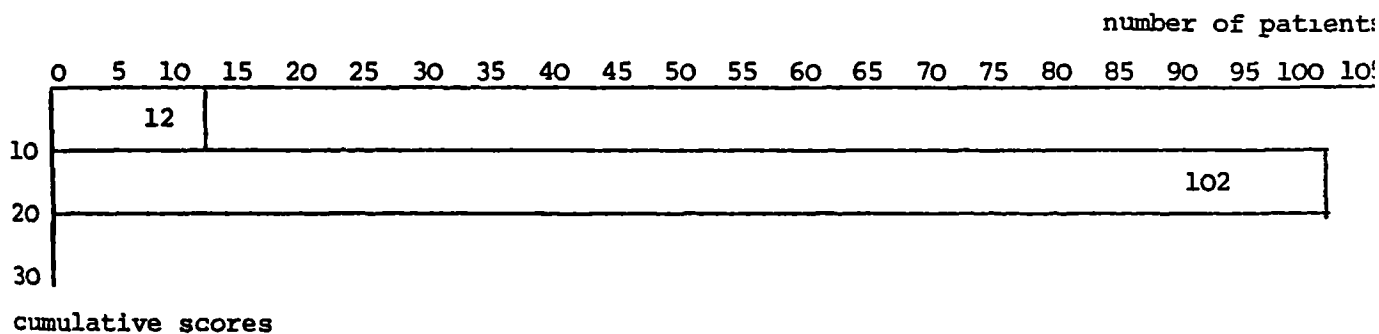


n = 114 total scores derived from 7 items
 possible range 0 - 35 actual range 14 - 29
 mean 21.23 standard deviation 2.83

There were no significant correlations between scores on this and any other variables.

Figure 8.10

Distribution of cumulative scores for each patient on the "relative planning" subscale, blocked in multiples of 10.

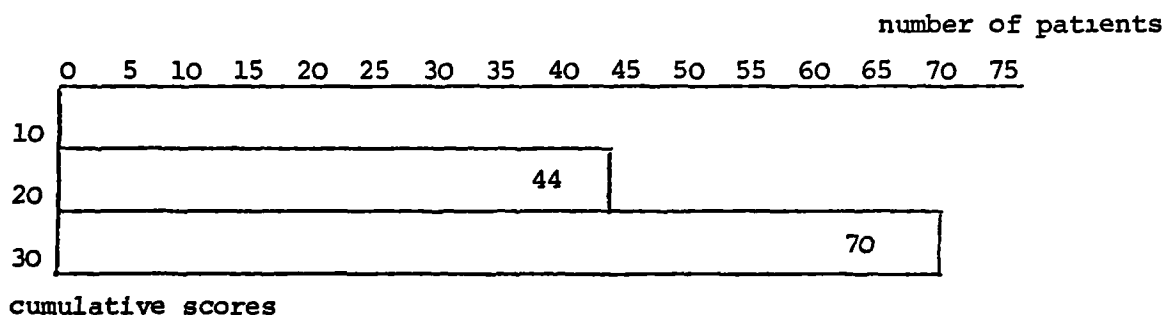


n = 114 total scores derived from 4 items
 possible range 0 - 20 actual range 8 - 19
 mean 14.02 standard deviation 2.53

High scores on this subscale were significantly associated with H1
 (χ^2 24.86 with 11 df, p .009) and high reported anxiety (χ^2 49.76 with
 33 df, p .031)

Figure 8.11

Distribution of cumulative scores for each patient on the "relative implementation" subscale, blocked in multiples of 10.



n = 114 total scores derived from 6 items
 possible range 0 - 30 actual range 15 - 30
 mean 21.36 standard deviation 2.86

High scores on this subscale were significantly associated with increased likelihood of having worked in a hospital (χ^2 25.22 with 15 df, p .047).

There were statistically significant correlations (at $p < .05$) among all 4 subscales, which were discussed in section 7.4.2.1.

8.3.3 Data from relatives (n = 72)

Table 8.28 shows the number and percentage of relatives who responded in each category for each item. The mean score and standard deviation for each item are also shown. It can be seen that most of the response categories were used. Excluding the "no answer" category, 108 of the 120 available categories (90%) were used, indicating a broad spread of attitudes. Items with the highest mean scores were Numbers 3, 8, 11, 12 and 19. Items with the lowest mean scores were Numbers 1, 6, 14, 16 and 24.

Table 8.28

Distribution of relatives' responses to each attitude item (n = 72)

See over (p. 225, 226)

Table 8.28 Distribution of relatives' responses to each attitude item (n = 72)

| item number | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | mean score | standard deviation |
|-------------|-----|-----|--------|------|-------------|------|-----|------|-------------|------|--------|------|------------|--------------------|
| | no. | % | number | % | number | % | no. | % | number | % | number | % | | |
| 1 | 0 | 0 | 24 | 33.3 | agree 39 | 54.2 | 1 | 1.4 | disagree 6 | 8.3 | 2 | 2.8 | 1.93 | .97 |
| 2 | 0 | 0 | 0 | 0 | disagree 8 | 11.1 | 7 | 9.7 | agree 39 | 54.2 | 18 | 25 | 3.93 | .89 |
| 3 | 0 | 0 | 1 | 1.4 | disagree 0 | 0 | 0 | 0 | agree 22 | 30.6 | 49 | 68.1 | 4.64 | .63 |
| 4 | 1 | 1.4 | 1 | 1.4 | disagree 11 | 15.3 | 6 | 8.3 | agree 36 | 50 | 17 | 23.6 | 3.75 | 1.11 |
| 5 | 2 | 2.8 | 0 | 0 | disagree 7 | 9.7 | 5 | 6.9 | agree 37 | 51.4 | 21 | 29.2 | 3.92 | 1.09 |
| 6 | 0 | 0 | 20 | 27.8 | disagree 32 | 44.4 | 4 | 5.6 | disagree 14 | 19.4 | 2 | 2.8 | 2.25 | 1.14 |
| 7 | 0 | 0 | 3 | 4.2 | agree 14 | 19.4 | 2 | 2.8 | disagree 26 | 36.1 | 27 | 37.5 | 3.83 | 1.24 |
| 8 | 0 | 0 | 1 | 1.4 | disagree 2 | 2.8 | 2 | 2.8 | agree 40 | 55.6 | 27 | 37.5 | 4.25 | .76 |
| 9 | 0 | 0 | 0 | 0 | disagree 3 | 4.2 | 4 | 5.6 | agree 44 | 61.1 | 21 | 29.2 | 4.15 | .7 |
| 10 | 0 | 0 | 7 | 9.7 | disagree 23 | 31.9 | 11 | 15.3 | agree 26 | 36.1 | 5 | 6.9 | 2.99 | 1.17 |
| 11 | 0 | 0 | 0 | 0 | disagree 0 | 0 | 2 | 2.8 | agree 34 | 47.2 | 36 | 50 | 4.47 | .55 |
| 12 | 0 | 0 | 0 | 0 | disagree 0 | 0 | 1 | 1.4 | agree 41 | 56.9 | 30 | 41.7 | 4.4 | .52 |

Table 8.28 (cont'd)

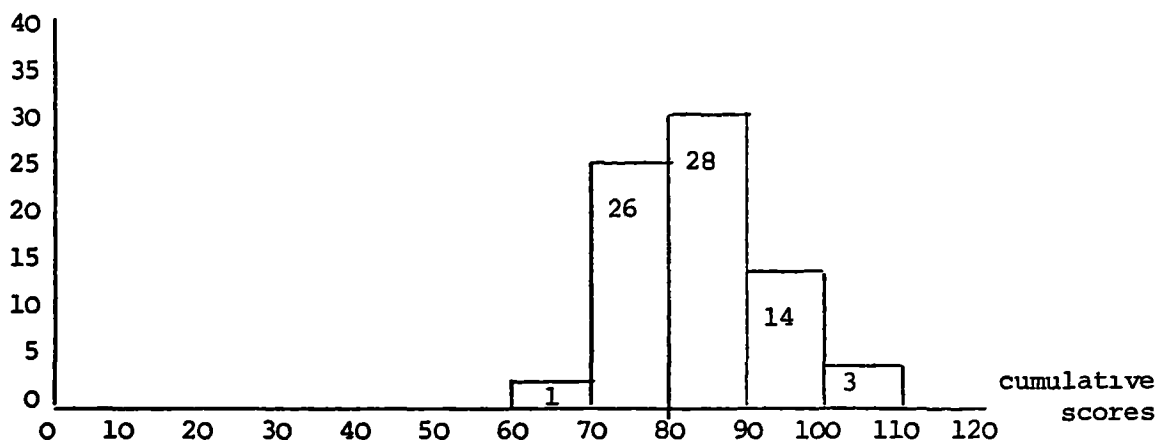
| item number | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | mean score | standard deviation |
|-------------|-----|-----|--------|------|-------------|------|-----|------|-------------|------|--------|------|------------|--------------------|
| | no. | % | number | % | number | % | no. | % | number | % | number | % | | |
| 13 | 0 | 0 | 2 | 2.8 | agree 19 | 26.4 | 10 | 13.9 | disagree 34 | 47.2 | 7 | 9.7 | 3.35 | 1.06 |
| 14 | 1 | 1.4 | 10 | 13.9 | agree 35 | 48.6 | 9 | 12.5 | disagree 16 | 22.4 | 1 | 1.4 | 2.44 | 1.07 |
| 15 | 0 | 0 | 7 | 9.7 | agree 19 | 26.4 | 6 | 8.3 | disagree 29 | 40.3 | 11 | 15.3 | 3.25 | 1.27 |
| 16 | 1 | 1.4 | 22 | 30.6 | agree 29 | 40.3 | 8 | 11.1 | disagree 11 | 15.3 | 1 | 1.4 | 2.12 | 1.1 |
| 17 | 1 | 1.4 | 0 | 0 | disagree 17 | 23.6 | 4 | 5.6 | agree 41 | 56.9 | 9 | 12.5 | 3.54 | 1.07 |
| 18 | 1 | 1.4 | 8 | 11.1 | agree 32 | 44.4 | 2 | 2.8 | disagree 23 | 31.9 | 6 | 8.3 | 2.78 | 1.28 |
| 19 | 0 | 0 | 0 | 0 | disagree 4 | 5.6 | 3 | 4.2 | agree 35 | 48.6 | 30 | 41.7 | 4.26 | .79 |
| 20 | 0 | 0 | 1 | 1.4 | disagree 2 | 2.8 | 4 | 5.6 | agree 26 | 36.1 | 39 | 54.2 | 4.39 | .83 |
| 21 | 0 | 0 | 13 | 18.1 | agree 34 | 47.2 | 7 | 9.7 | disagree 13 | 18.1 | 5 | 6.9 | 2.48 | 1.19 |
| 22 | 0 | 0 | 1 | 1.4 | disagree 1 | 1.4 | 2 | 2.8 | agree 44 | 61.1 | 24 | 33.3 | 4.24 | .7 |
| 23 | 1 | 1.4 | 0 | 0 | disagree 4 | 5.6 | 6 | 8.3 | agree 42 | 58.3 | 19 | 26.4 | 4.01 | .89 |
| 24 | 0 | 0 | 8 | 11.1 | agree 39 | 54.2 | 14 | 19.4 | disagree 10 | 13.9 | 1 | 1.4 | 2.4 | .91 |

8.3.3.1 Cumulative scores for the whole scale and 4 subscales

Figure 8.12

Distribution of cumulative scores for each relative on the whole attitude scale, blocked in multiples of 10.

number of relatives

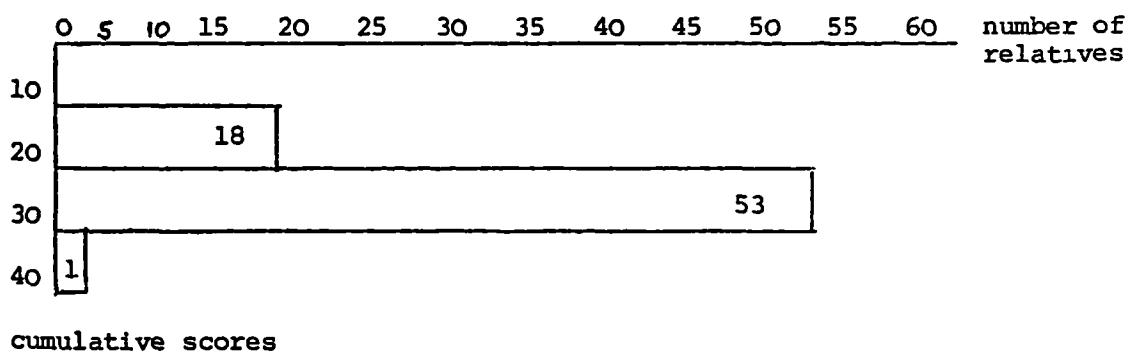


n = 72 total scores derived from 24 items
 possible range 0 - 120 actual range 67 - 107
 mean 83.76 standard deviation 8.88

Cumulative scores for the 4 subscales were computed, the distributions of which are shown in Figures 8.13 to 8.16.

Figure 8.13

Distribution of cumulative scores for each relative on the "patient planning" subscale, blocked in multiples of 10.



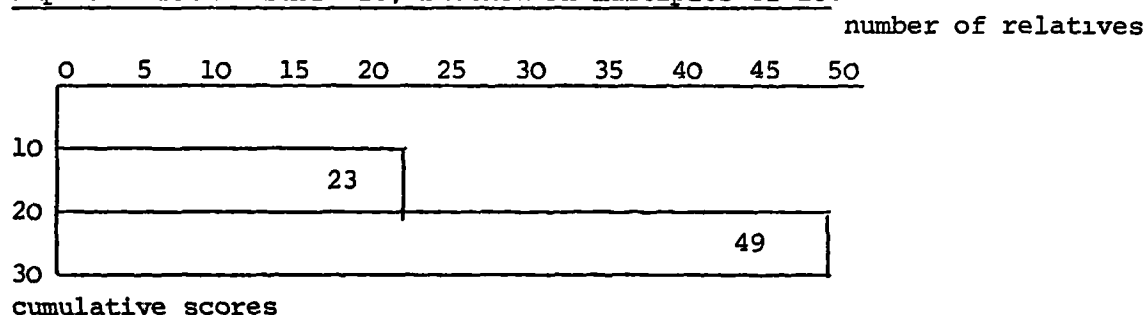
cumulative scores

n = 72 total scores derived from 7 items
 possible range 0 - 35 actual range 14 to 31
 mean 23.22 standard deviation 3.88

High scores on this subscale were significantly associated with an increased likelihood of being married (χ^2 46.47 with 32 df, p .047).

Figure 8.14

Distribution of cumulative scores for each relative on the "patient implementation" subscale, blocked in multiples of 10.

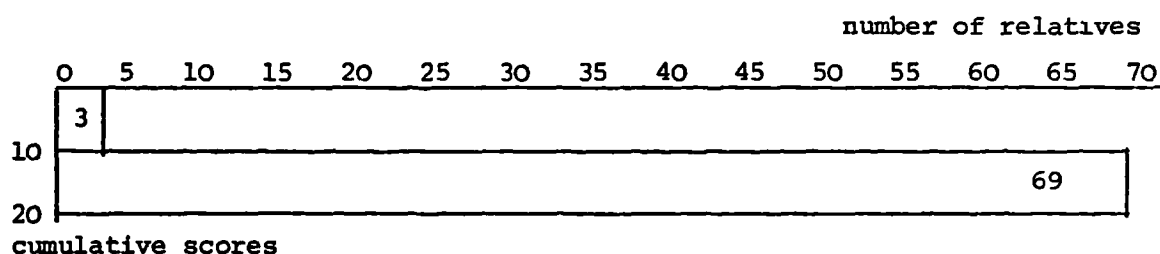


n = 72 total scores derived from 7 items
 possible range 0 - 35 actual range 15 - 30
 mean 22.15 standard deviation 2.99

There were no significant correlations between scores on this and any other variables

Figure 8.15~

Distribution of cumulative scores for each relative on the "relative planning" subscale, blocked in multiples of 10.

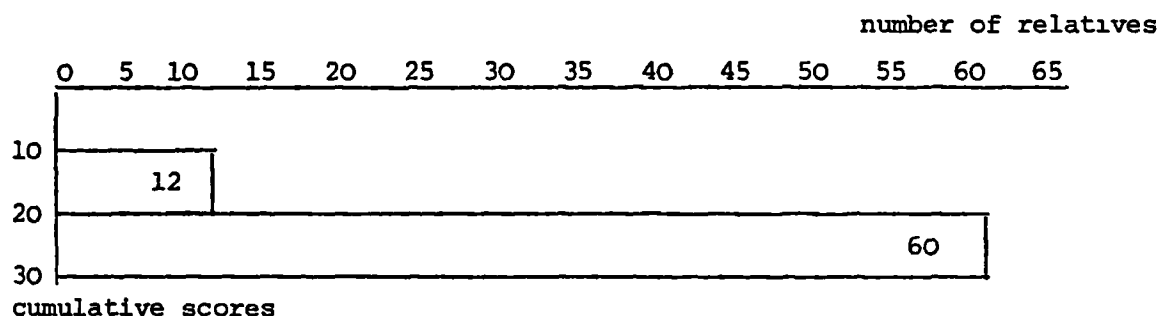


n = total scores derived from 4 items
 possible range 0 - 20 actual range 8 - 20
 mean 14.83 standard deviation 2.31

High cumulative scores on this subscale were significantly associated with higher social class (χ^2 85.99 with 66 df, p .048) and increased likelihood of having worked in a hospital (χ^2 20.48 with 11 df, p .039)

Figure 8.16

Distribution of cumulative scores for each relative on the "relative implementation" subscale, blocked in multiples of 10.



n = 72 total scores derived from 6 items
 possible range 0 - 30 actual range 18 - 30
 mean 23.56 standard deviation 2.81

High scores on this sub-scale were significantly associated with being married (chi-square χ^2 with 24 df, p .03)

There were statistically significant correlations (at $p < .05$) among all 4 subscales, which were discussed in Section 7.4.2.1.

8.3.4 Comparisons across subject groups

Table 8.29

"Attitudes towards patient and family participation in care" scale.
 Mean scores and standard deviations for each item, showing F ratios and
 significance levels across subject groups.

| item number | PATIENTS | | RELATIVES | | NURSES | | ANOVA | |
|----------------|---------------|-----------------------|---------------|-----------------------|---------------|-----------------------|------------|------|
| | mean score | standard deviation | mean score | standard deviation | mean score | standard deviation | F ratio | P |
| 1 | 1.89 | .86 | 1.93 | .97 | 2.8 | 1.16 | 27.29 | .000 |
| 2 | 3.79 | .99 | 3.93 | .89 | 3.86 | 1.02 | - | NS |
| 3 | 4.12 | 1.02 | 4.64 | .63 | 4.18 | .97 | 7.75 | .001 |
| 4 | 3.59 | 1.2 | 3.75 | 1.11 | 3.82 | .99 | - | NS |
| 5 | 3.73 | 1.14 | 3.92 | 1.09 | 4.33 | .59 | 11.30 | .000 |
| 6 | 2.03 | 1.2 | 2.25 | 1.14 | 2.00 | .99 | - | NS |
| 7 | 3.61 | 1.27 | 3.83 | 1.24 | 4.43 | .77 | 16.06 | .000 |
| 8 | 4.17 | .88 | 4.25 | .76 | 4.67 | .51 | 13.95 | .000 |
| 9 | 4.03 | .87 | 4.15 | .7 | 4.71 | .58 | 25.40 | .000 |
| 10 | 2.84 | 1.25 | 2.99 | 1.17 | 3.85 | .94 | 24.67 | .000 |
| 11 | 4.15 | 1.03 | 4.47 | .55 | 4.16 | .8 | 3.79 | .024 |
| 12 | 4.27 | .72 | 4.4 | .52 | 4.53 | .5 | 5.21 | .006 |
| 13 | 3.13 | 1.3 | 3.35 | 1.06 | 3.7 | .91 | 7.25 | .001 |
| 14 | 2.17 | .94 | 2.44 | 1.07 | 2.73 | 1.08 | 8.32 | .000 |
| 15 | 2.76 | 1.2 | 3.25 | 1.27 | 4.08 | .98 | 34.99 | .000 |
| 16 | 1.96 | .78 | 2.12 | 1.1 | 3.22 | 1.06 | 51.00 | .000 |
| 17 | 3.24 | 1.28 | 3.54 | 1.07 | 3.54 | 1.1 | - | NS |
| 18 | 2.28 | 1.04 | 2.78 | 1.28 | 3.34 | 1.16 | 24.03 | .000 |
| 19 | 3.95 | .97 | 4.26 | .79 | 4.38 | .59 | 8.59 | .000 |
| 20 | 4.17 | .87 | 4.39 | .83 | 4.68 | .47 | 12.99 | .000 |
| 21 | 2.21 | 1.18 | 2.48 | 1.19 | 3.27 | 1.17 | 23.38 | .000 |
| 22 | 4.07 | .77 | 4.24 | .7 | 4.49 | .69 | 9.23 | .000 |
| 23 | 3.96 | .89 | 4.01 | .89 | 4.36 | .76 | 7.14 | .001 |
| 24 | 2.24 | .95 | 2.4 | .91 | 2.41 | .96 | - | NS |

One way ANOVA's with group as dependent variable revealed statistically
 significant differences among the means of the three subject groups on

19 of the 24 attitude items. 14 were significant at $p < .001$, 4 were significant at $p < .01$ and 1 was significant at $p < .05$.

Nurses had the highest mean scores and patients the lowest on 20 of the 24 items. On the remaining four items (Numbers 2, 3, 6 and 11) relatives had the highest mean scores on all 4 and patients had the lowest scores on items 2, 3 and 11.

Table 8.30

Mean total cumulative scores and subscale cumulative scores, showing F ratios and significance levels across subject groups

| subscale | mean cumulative scores | | | ANOVA | |
|-------------------------|------------------------|-----------|--------|---------|------|
| | PATIENTS | RELATIVES | NURSES | F ratio | p |
| patient planning | 21.74 | 23.22 | 24.48 | 14.19 | .000 |
| patient implementation | 21.23 | 22.15 | 25.72 | 72.67 | .000 |
| relative planning | 14.02 | 14.83 | 16.14 | 21.77 | .000 |
| relative implementation | 21.36 | 23.56 | 25.15 | 51.92 | .000 |
| total scale | 78.34 | 83.76 | 91.49 | 65.58 | .000 |

The three subject groups differed significantly ($p < .001$) on each of the four subscales and on the total cumulative scores. In each case nurses had the highest mean scores and patients the lowest.

Table 8.31 - See over (p. 231)

Table 8.31

Rank order of mean scores for each item in the attitude scale, for the 3 subject groups.

| Item number | Nurses | Patients | Relatives |
|-------------|--------|----------|-----------|
| 1 | 21 | 24 | 24 |
| 2 | 13 | 10 | 10 |
| 3 | 10 | 5 | 1 |
| 4 | 15 | 13 | 13 |
| 5 | 9 | 11 | 11 |
| 6 | 24 | 22 | 22 |
| 7 | 6 | 12 | 12 |
| 8 | 3 | 2.5 | 6 |
| 9 | 1 | 7 | 8 |
| 10 | 14 | 16 | 17 |
| 11 | 11 | 4 | 2 |
| 12 | 4 | 1 | 3 |
| 13 | 16 | 15 | 15 |
| 14 | 22 | 21 | 20 |
| 15 | 12 | 17 | 16 |
| 16 | 20 | 23 | 23 |
| 17 | 17 | 14 | 14 |
| 18 | 18 | 18 | 18 |
| 19 | 7 | 9 | 5 |
| 20 | 2 | 2.5 | 4 |
| 21 | 19 | 20 | 19 |
| 22 | 5 | 6 | 7 |
| 23 | 8 | 8 | 9 |
| 24 | 23 | 19 | 21 |

ranks 1 is high, 24 is low.

The Kendall coefficient of concordance revealed a statistically significant correlation among the three subject groups on the rank order of the mean scores for the attitude items.

With $n = 3$ and $k = 24$, the coefficient of concordance (W) is 0.93.

This very high correlation coefficient is statistically significant at $p < .001$.

8.3.5 Subjects' comments on "attitudes towards patient and family participation in care" scale

At the end of the two-page scale, which was identical for all subjects, was written "If you wish to comment, please use the other side of this page".

48 (16.4%) of the subjects wrote comments, of whom 30 were nurses, 12 were patients and 6 were relatives. Thus 28% of the nurses, 10.5% of the patients and 8.3% of the relatives commented. The large number of nurses who wrote comments indicates their considerable interest in patient and family participation in care.

Comments on specific items

Table 8.32

Number of comments made by members of each subject group in relation to specific items on the "attitudes towards patient and family participation in care" scale

| Item number | Number of comments | | | |
|-------------|--------------------|--------|----------|-----------|
| | total | nurses | patients | relatives |
| 1 | 5 | 3 | 1 | 1 |
| 2 | 3 | 1 | 1 | 1 |
| 3 | 6 | 5 | 1 | 0 |
| 4 | 3 | 2 | 0 | 1 |
| 5 | 0 | 0 | 0 | 0 |
| 6 | 8 | 6 | 2 | 0 |
| 7 | 1 | 0 | 1 | 0 |
| 8 | 0 | 0 | 0 | 0 |
| 9 | 3 | 0 | 3 | 0 |
| 10 | 7 | 5 | 2 | 0 |
| 11 | 5 | 4 | 1 | 0 |
| 12 | 0 | 0 | 0 | 0 |
| 13 | 4 | 4 | 0 | 0 |
| 14 | 6 | 3 | 2 | 1 |
| 15 | 2 | 2 | 0 | 0 |
| 16 | 8 | 7 | 1 | 0 |
| 17 | 3 | 2 | 1 | 0 |
| 18 | 3 | 2 | 0 | 1 |
| 19 | 2 | 1 | 1 | 0 |
| 20 | 0 | 0 | 0 | 0 |
| 21 | 3 | 2 | 1 | 0 |
| 22 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 |
| 24 | 3 | 2 | 1 | 0 |
| Totals | 75 | 51 | 19 | 5 |

Item 1. "The essence of nursing is doing things for people to enable them to rest and relax in hospital"

All the comments indicated disagreement with the statement. One patient, a relative and a NO at H2 wrote that the essence of nursing was to enable

the patient to get better. A SN at H2 commented that rest and relaxation "might be essential in certain circumstances, but not in all".

Item 2. "When a patient is first admitted, the nurse should ask him which of his problems and needs he regards as most important"

All comments disagreed with the statement. A patient and a relative wrote that this was a medical rather than a nursing responsibility. A NO at H2 wrote that patients needed time to identify their problems.

Item 3. "Relatives have a right to know what is being done to their 'nearest and dearest' by the nursing staff"

The nurses agreed with the statement but emphasised the need for confidentiality (NO, H2); to obtain the patient's permission (sister, H2, NO, H2); to involve only the next-of-kin (SN, H1) and that the sister should use her discretion (student nurse, H2). The patient's comment was "by asking in the correct manner" which suggests a perceived need to request information in a socially-acceptable way, presumably to avoid alienating the nurses.

Item 4. "When nurses are considering what is best for a particular patient they should ask him what he prefers"

A relative cautioned "but this does not mean it is what is best for him". An SEN at H1 commented that the question was not specific enough to be understood and a NO at H1 agreed with the statement "providing there is no clash with treatment".

Item 6. "If patients are well enough they should be allowed to keep their own medicines in their lockers, and take them as prescribed"

Several answers emphasised that it depended on whether the patient was reliable, intelligent and well enough (2 student nurses, H2, 2 patients). An NO at H2 identified a need for guidance for patients and 2 nurses (a sister and a student nurse at H2) were concerned that "other confused or depressed patients might take them"

A graduate student nurse at H2 commented in detail on several relevant issues:

"I put 'don't know' as I felt it was an ambiguous question. Certain medications, such as vitamins, simple linctus or other cold preparations... are safe to be left with the patient. An average intelligent person can be entrusted surely to take these medicines sensibly, as he would at home, as long as he understands the direction of use. On admission to hospital the vast majority of patients are robbed of their identity and self-esteem and personal dignity. I have agreed with most of the questions which give back to patients the rights and ability to be as independent as the illness allows"

Item 7. "Patients must accept that whilst in hospital they have no right to question nurses' decisions about what needs to be done to them."

A patient in H2 wrote:

"Of course the patient has the right to question his/her treatment ... freedom of speech to be able to say what you think is man's greatest freedom".

Item 9. "Even if it would be quicker for a nurse to dress an elderly lady, she should try to encourage the old lady to do it herself"

Three patients expressed reservations about this. One indicated that it would depend on whether the nurse had time available. The other two wrote that it depended how ill or able-bodied the elderly lady was.

Item 10. "Patients who are well enough should be allowed to write up their own charts of how much fluid they are drinking each day"

Patients commented on the risks of unreliable and inaccurate records (2 patients, H2). Nurses wrote that it depended on the patient's ability and condition (sister H1, Sister H2) and would require supervision (Sister H2, SN H1). One NO at H1 described the suggested practice as "against nurse training".

Item 11. "Before an operation the implications and risks of surgery should be discussed with the patients's nearest relative"

Two nurses wrote that this required the patient's consent (NO and sister, H2) and another wrote that it depended on the "relatives' state of mind" (student nurse, H2). A patient in H1 argued that it was impossible to generalise and "the age and mental state of the patient should be taken into consideration".

Item 13. "It is up to the nurses to assess how often patients need to wash their hair whilst in hospital"

All nurses commented that it would depend on the patient's ability and condition (student nurse, SN, sister and NO at H2).

Item 14. "It is always the nurse's responsibility to decide on the most suitable time to renew a patient's bandages"

A patient, a relative and a student nurse in H2 argued that only the patient knows when a bandage is uncomfortable and therefore needs to be changed. Two nurses wrote that bandages should be "changed when necessary" without specifying who should make that decision. A patient in H2 wrote: "I have disagreed because it could equally well be the doctor in charge of the case".

Item 15. "Relatives must accept that they are not entitled to do anything for the patient while he is the responsibility of the hospital"

One comment agreed with this statement and the other disagreed. A SN in H2 wrote that "risk of litigation and possibly only lay understanding means that they are 'not entitled'. However cooperation should be sought".

A sister in H1 pointed out that "relatives have responsibility for the patient before admission and after discharge and therefore must be encouraged and supported while patient is in hospital".

Item 16. "If a patient has a skin disease, the nurse should apply the ointment to ensure that it is rubbed in properly"

The 7 nurses who commented expressed varying opinions. A sister and an NO at H1 considered that nurses should teach patients the necessary skills, then encourage self-care. Several agreed that patients could apply ointment themselves (SEN, H1) depending on their age, ability and condition (NO, H2), particularly for a chronic skin disease (student nurse, H2), but a nurse should check it is rubbed in properly (student nurse, H2). A patient and an SNO at H1 described circumstances in which nurses should apply ointments.

Item 17. "As far as possible patients should be allowed to decide for themselves when they want to wash and bath"

All respondents agreed in principle but expressed concern that this could "disrupt the ward routine" (sister H1, sister H2). A patient cautioned that this was appropriate only "if fit enough".

Item 18. "It will only lead to problems for the nurses if relatives are allowed to do too much for the patient"

A relative thought the statement was ambiguous and a student nurse at H2 agreed that it depended on "what and how much they do and if they understand diseases". Another student nurse commented that problems would not arise if "communication between relatives and nursing staff is good".

Item 19. "If a patient is going to need care at home, the nurses should teach his wife how to look after him while he is still in hospital"

A student nurse at H1 disagreed as:

"The patient would, if he needed help at home, be discharged with home help, home nurses, etc. Wouldn't his wife have her own ideas on how to look after him and probably would continue to do so anyway".

Similarly, a patient wrote "with love she will know !"

Item 21. "Relatives must accept that nurses have the training and experience to assess the patient's needs without interference from the family"

A patient commented that :

"there are a very big percentage of first year student nurses on wards and ... they do not have the nursing practice under their belt".

Similarly, a student nurse in H2 agreed that many nurses lacked training and experience. A SN at H2 wrote that: "Relatives often are upset, have

lack of insight or personal prejudice against the hospital".

Item 24. "Most patients are happy to hand over to the nurses complete responsibility for deciding what care they require"

2 nurses disagreed. One wrote "not if they are normal" (NO, H2) and the other wrote "Most patients allow this to happen. Some are happy, but some are definitely not" (SNO, H2). A patient commented that the item was ambiguous.

General comments

13 subjects added general comments which were not specific to particular items, of whom 8 were nurses, 4 relatives and 1 patient.

Several themes emerged. The most common, expressed by 6 respondents concerned the difficulty of generalising about complex issues which depended on individual circumstances. Typical of this was a relative's comment:

"... my answers assume that the patient is capable, intelligent... and has commonsense... In theory I am in favour of patients... doing things for themselves, assisted by their relatives; but it is probably not a good idea to set up a system which depends on self-help"

Another relative commented that:

"Some treatment should be under the supervision of a trained nurse in order that it is carried out correctly. Other duties like helping with tea or dressing could be done by relatives".

Similarly, a SN in H1 wrote:

"Some of the questions can't be answered in general terms without considering the individual patient's orientation, understanding of his illness, etc."

A second theme concerned the possible problems of patient and family participation in nursing. 2 relatives described the risks of "interfering with the routine of the ward, which is very necessary when dealing with several patients". An NO at H1 commented that difficulties might arise if the nurse incorrectly thought that relatives were carrying out necessary care, when they were not. A student nurse in H1 and a patient wrote that nurses were trained to give care, which relatives and patients were not.

Another theme, expressed by 2 qualified nurses at H2 concerned the problem of relatives being excluded from care in hospital, then expected to resume responsibility on discharge. They argued that teaching basic care skills to patients and relatives was an essential part of the nurse's role.

Lastly, a sister at H2 cautioned that patients' wishes regarding relative participation should be taken into account as "patients may prefer that relatives do not know details of diagnosis and treatment".

8.4 NURSES' ORGANISATION OF CARE. Each item in this 8 item scale was scored from 1 to 5, so that a high score indicated care organised to allow patient and family participation.

Table 8.33

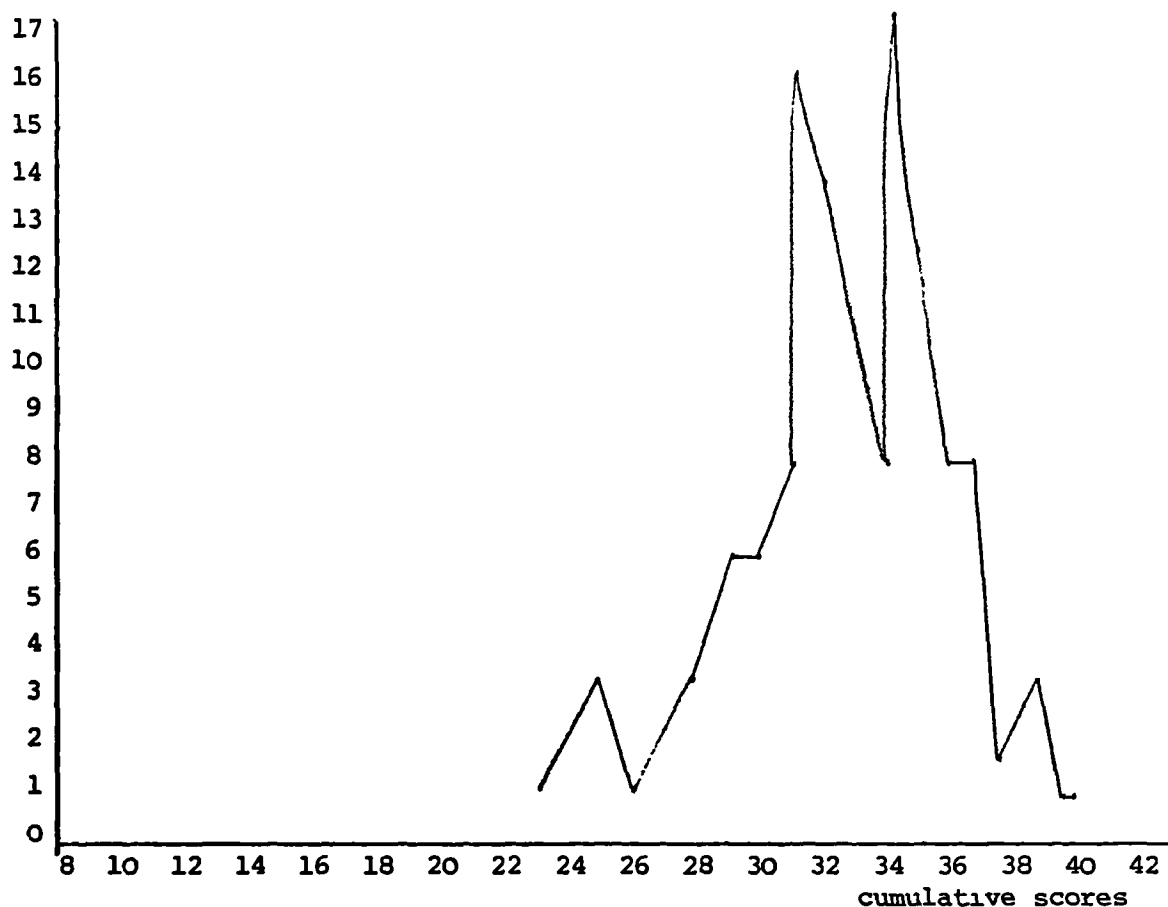
Distribution of scores for each item

| Item | number | % | number | | % | number | | % | number | | % | total number | total % | mean | standard deviation |
|-----------------------|--------|---------|--------|-------|---------|--------|------------|---------|--------|--------|---------|--------------|---------|------|--------------------|
| | | | always | often | | often | some-times | | never | always | | | | | |
| 1 | 4 | 3.7 | 14 | 37 | 13.1 | 34.6 | 47 | 43.9 | 5 | | 4.7 | 107 | 100 | 3.33 | .89 |
| 2 | 0 | 0 | 0 | 1 | 0 | 0.9 | 57 | 53.3 | 49 | | 45.8 | 107 | 100 | 4.45 | .52 |
| 3 | 0 | 0 | 0 | 1 | 0 | 0.9 | 30 | 28 | 76 | | 71 | 107 | 100 | 4.7 | .48 |
| 4 | 2 | 1.9 | 4 | 32 | 3.7 | 29.9 | 48 | 44.9 | 21 | | 19.6 | 107 | 100 | 3.77 | .87 |
| 5 | 1 | 0.9 | 2 | 44 | 1.9 | 41.1 | 41 | 38.3 | 19 | | 17.8 | 107 | 100 | 3.7 | .81 |
| 6 | 0 | 0 | 1 | 1 | 0.9 | 0.9 | 18 | 16.8 | 87 | | 81.3 | 107 | 100 | 4.79 | .49 |
| 7 | 3 | 2.8 | 5 | 40 | 4.7 | 37.4 | 34 | 31.8 | 25 | | 23.4 | 107 | 100 | 3.68 | .97 |
| 8 | 1 | 0.9 | 6 | 17 | 5.6 | 15.9 | 64 | 59.8 | 19 | | 17.8 | 107 | 100 | 3.88 | .79 |
| score 1 don't know | | score 2 | | | score 3 | | | score 4 | | | score 5 | | | | |

Figure 8.17

Distribution of cumulative scores for each subject

number of subjects

possible range of scores $8 \times 1 - 5 = 8 - 40$

actual range of scores 23-40

mean 32.31

standard deviation 3.24

All the cumulative scores were in the top half of the range, but there was no "ceiling effect"

Association between cumulative scores and other variables

High cumulative scores were significantly associated with more senior grade (the Kendall r .28, p .000); more professional qualifications (the Kendall r .14, p .038); and older age group (the Kendall r .21, p .005). There were no other statistically significant cross-tabulations.

8.5 PATIENTS' INVOLVEMENT IN CARE DURING THIS STAY IN HOSPITAL

This 8 item scale contained 4 pairs of questions, one concerning actual level of involvement and one concerning ideal level of involvement in care.

Table 8.34 - see overleaf (p. 239)

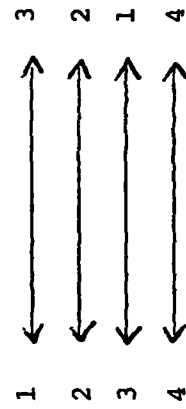
Table 8.34

Distribution of scores for each item

| item | score 0 no answer | score 1 don't know | | score 2 never | | score 3 sometimes | | score 4 often | | score 5 always | | total no. | total % | mean | S.D. |
|------|----------------------------|-----------------------|------|------------------|------|----------------------|------|------------------|------|-------------------|------|--------------|------------|------|------|
| | | no. | % | no. | % | no. | % | no. | % | no. | % | | | | |
| 1 | 1 | 5 | 4.4 | 67 | 58.8 | 25 | 21.9 | 14 | 12.3 | 2 | 1.8 | 114 | 100 | 2.45 | 0.86 |
| 2 | 1 | 10 | 8.8 | 78 | 68.4 | 21 | 18.4 | 4 | 3.5 | 0 | 0 | 114 | 100 | 2.15 | 0.65 |
| 3 | 0 | 1 | 0.9 | 8 | 7 | 30 | 26.3 | 43 | 37.7 | 32 | 28.1 | 114 | 100 | 3.85 | 0.94 |
| 4 | 1 | 19 | 16.7 | 70 | 61.4 | 19 | 16.7 | 5 | 4.4 | 0 | 0 | 114 | 100 | 2.07 | 0.74 |
| 1 | 0 | 3 | 2.6 | 3 | 2.6 | 19 | 16.7 | 40 | 35.1 | 49 | 43 | 114 | 100 | 4.13 | 0.96 |
| 2 | 1 | 3 | 2.6 | 22 | 19.3 | 56 | 49.1 | 19 | 16.7 | 13 | 11.4 | 114 | 100 | 3.13 | 0.99 |
| 3 | 0 | 7 | 6.1 | 19 | 16.7 | 40 | 35.1 | 27 | 23.7 | 21 | 18.4 | 114 | 100 | 3.32 | 1.14 |
| 4 | 1 | 7 | 6.1 | 37 | 32.5 | 43 | 37.7 | 13 | 11.4 | 13 | 11.4 | 114 | 100 | 2.87 | 1.1 |

actual
involvement
scaleideal
involvement
scalePairs

Actual involvement Ideal involvement



Patients obtained significantly higher scores on each of the 4 questions about ideal involvement than its paired question about actual involvement.

Table 8.35

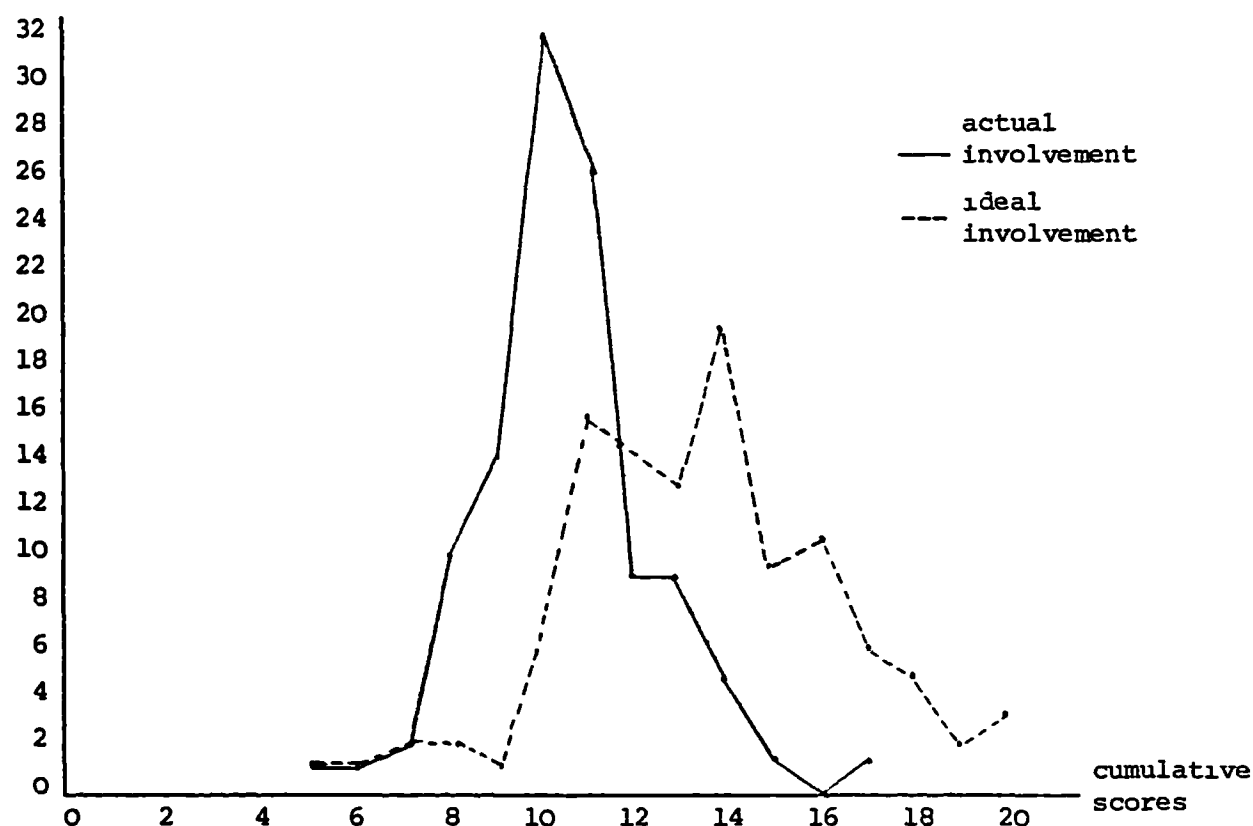
Summary of related t tests comparing patients' actual and ideal levels of involvement in care

| actual involvement | ideal involvement | t value | df | probability |
|--------------------|-------------------|---------|-----|-------------|
| 1 | 3 | - 7.31 | 102 | .000 |
| 2 | 2 | - 9.92 | 100 | .000 |
| 3 | 1 | - 3.44 | 109 | .001 |
| 4 | 4 | - 6.39 | 90 | .000 |

Figure 8.18

Cumulative scores for actual and ideal involvement in care

number of subjects



| | actual involvement cumulative scale | ideal involvement cumulative scale |
|--------------------|----------------------------------------|---------------------------------------|
| n | 114 | 114 |
| minimum | 5 | 5 |
| maximum | 17 | 20 |
| range | 12 | 15 |
| mean | 10.51 | 13.41 |
| standard deviation | 1.88 | 2.98 |

Patients' cumulative ideal involvement scores were significantly higher than their cumulative actual involvement scores (related t test, $t = 10.42$ with 113 df, $p < .001$).

Associations between cumulative scores and other variables

High cumulative scores for actual involvement in care during this stay in hospital were significantly associated with high scores for knowledge of diagnosis tests and treatment (the Kendall $r = .18$, $p = .008$). High cumulative scores for ideal level of involvement in care were significantly associated with older age group (the Kendall $r = .15$, $p = .037$). There was also a significant association between high cumulative scores on the ideal and actual involvement scales (the Kendall $r = .24$, $p = .000$). No other statistically significant cross-tabulations were found.

8.6 RELATIVES' "INVOLVEMENT IN CARE DURING THIS STAY IN HOSPITAL" SCALE

Like the patients' scale, this contained 4 pairs of questions, one concerning actual involvement and one concerning level of involvement in care.

Table 8.36 See overleaf (p. 242)

Table 8.36

Distribution of scores for each item

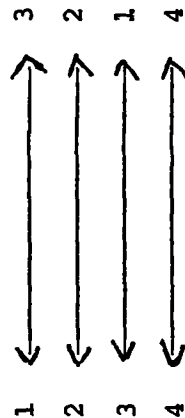
| item | score 0 no answer | | score 1 don't know | | score 2 never | | score 3 sometimes | | score 4 often | | score 5 always | | total no. | total % | mean | S.D. |
|------|----------------------|---|-----------------------|------|------------------|------|----------------------|------|------------------|------|-------------------|------|--------------|------------|------|------|
| | no. | % | no. | % | no. | % | no. | % | no. | % | no. | % | | | | |
| 1 | 0 | | 27 | 37.5 | 21 | 29.2 | 15 | 20.8 | 7 | 9.7 | 2 | 2.8 | 72 | 100 | 2.11 | 1.11 |
| 2 | 0 | | 1 | 1.4 | 49 | 68.1 | 17 | 23.6 | 4 | 5.6 | 1 | 1.4 | 72 | 100 | 2.37 | 0.68 |
| 3 | 0 | | 20 | 27.8 | 10 | 13.9 | 19 | 26.4 | 19 | 26.4 | 4 | 5.6 | 72 | 100 | 2.68 | 1.29 |
| 4 | 0 | | 4 | 5.6 | 50 | 69.4 | 12 | 16.7 | 4 | 5.6 | 2 | 2.8 | 72 | 100 | 2.31 | 0.78 |
| 1 | 0 | | 3 | 4.2 | 1 | 1.4 | 10 | 13.9 | 25 | 34.7 | 33 | 45.8 | 72 | 100 | 4.17 | 1.01 |
| 2 | 0 | | 2 | 2.8 | 2 | 2.8 | 19 | 26.4 | 27 | 37.5 | 22 | 30.6 | 72 | 100 | 3.9 | 0.97 |
| 3 | 0 | | 4 | 5.6 | 5 | 6.9 | 19 | 26.4 | 24 | 33.3 | 20 | 27.8 | 72 | 100 | 3.71 | 1.12 |
| 4 | 0 | | 5 | 6.9 | 4 | 5.6 | 21 | 29.2 | 23 | 31.9 | 19 | 26.4 | 72 | 100 | 3.65 | 1.14 |

actual
involvement
scale

ideal
involvement
scale

Pairs

Actual involvement Ideal involvement



Relatives obtained significantly higher scores on each of the 4 questions about ideal involvement than its paired question about actual involvement.

Table 8.37

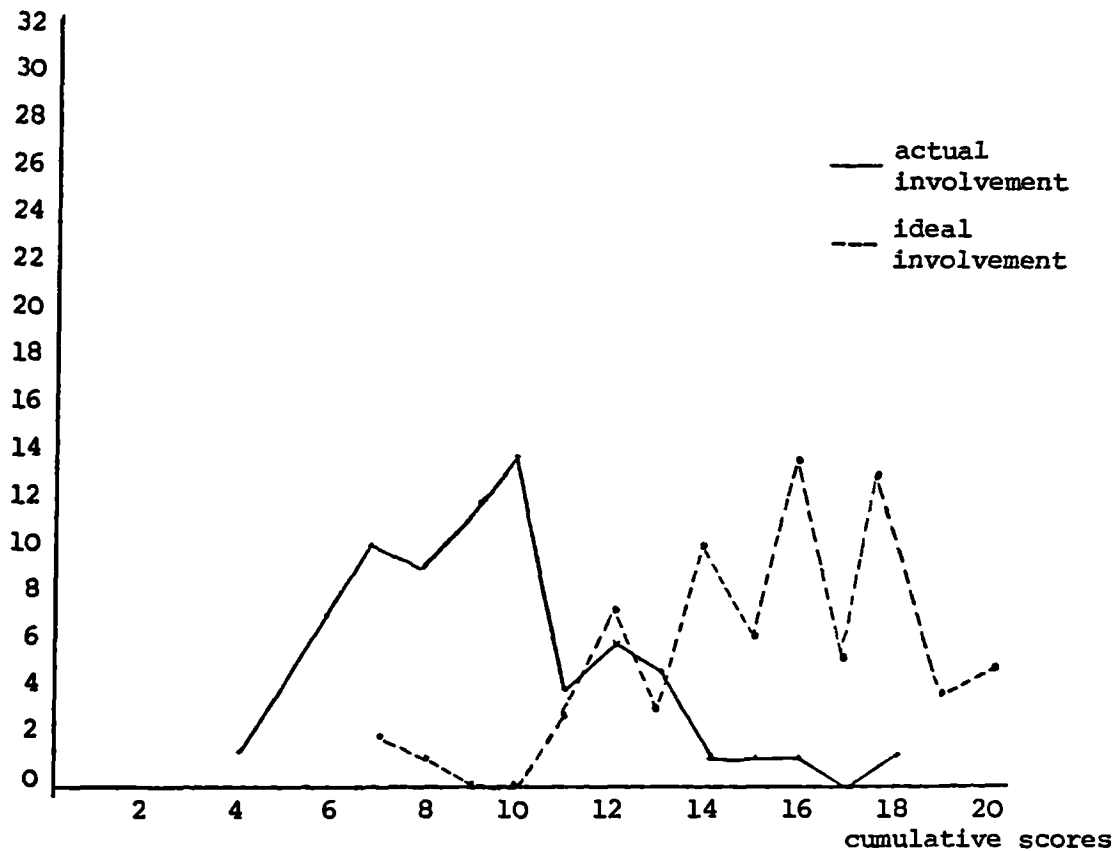
Summary of related t-tests comparing relatives' actual and ideal levels of involvement in care.

| actual involvement | ideal involvement | t value | df | probability |
|--------------------|-------------------|---------|----|-------------|
| 1 | 3 | - 5.61 | 43 | .000 |
| 2 | 2 | - 18.35 | 67 | .000 |
| 3 | 1 | - 6.47 | 49 | .000 |
| 4 | 4 | - 10.28 | 62 | .000 |

Figure 8.19

Cumulative scores for actual and ideal involvement in care

number of subjects



| | actual involvement cumulative scale | ideal involvement cumulative scale |
|--------------------|----------------------------------------|---------------------------------------|
| n | 72 | 72 |
| minimum | 4 | 7 |
| maximum | 18 | 20 |
| range | 14 | 13 |
| mean | 9.44 | 15.43 |
| standard deviation | 2.59 | 2.95 |

Relatives' cumulative ideal involvement scores were significantly higher than their cumulative actual involvement scores (related t-test, t value - 13.69 with 71 df, $p < .001$)

Associations between cumulative scores and other variables

High cumulative scores for actual involvement in care during this stay in hospital were significantly associated with more previous experience as a hospital patient (the Kendall r .19, p .023) and with high scores for knowledge of the patient's diagnosis and treatment (the Kendall r .17, p .03). High cumulative scores for ideal level of involvement in care were significantly associated with previous hospital employment (the Kendall r .17, p .033). No other statistically significant correlation coefficients were found.

8.5/6.1 Comparison of patients and relatives

Independent t tests showed that patients had higher cumulative scores on the "actual involvement" subscale than relatives ($p < .01$). Patients obtained significantly higher scores on Items 1 and 3 ($p < .001$), but relatives scored (non significantly) higher than patients on Items 2 and 4.

Independent t tests showed that relatives had higher cumulative scores on the "ideal involvement" subscale than patients ($p < .001$). There were no differences on Item 1, but relatives had higher scores than patients on Items 2, 3 and 4 ($p < .001$).

8.4/5/6.2 Subjects comments on nurses' "organisation of care" and patients' and relatives' "involvement in care during this stay in hospital" scales.

At the end of the page was written: "If you wish to make any general comments please use the other side of this sheet of paper". 10 (3.4%) of the subjects wrote comments, of whom 8 were nurses and 2 were patients.

Comments concerning patient participation

There were 6 comments, of which 2 could be classified as positive, 3 as neutral and one as negative.

The positive comments were that patients should be involved in the organisation of care and were always encouraged to be as independent as possible to maintain their self-esteem and self-care capabilities and therefore improve their quality of life (sister, H1); and that it is psychologically inappropriate to insist on helping a patient who is able to help himself (SNO, H2).

The neutral comments were:

"Occasionally, although a patient is capable of doing something, e.g. wash themselves, it often reassures them and makes them feel more cared for if a nurse gives them a little help, not making a habit of it though" (Student nurse, H2).

"These decisions depend very much on the individual patient's requirements" (Sister, H1); and

"Every case depends on complex psychological as well as medical factors. How can one possibly generalize?" (Patient, H2).

The only negative comment was that:

"pressure of work can easily interfere with the desire to plan with the patient" (SNO, H2).

Comments concerning relative participation

There were 6 comments, of which one could be classified as positive, 3 as neutral and 2 as negative.

The positive comment was that:

"If it is medically safe, relatives are involved in the organisation of care... to enable them to know how the patient is progressing and to enable continuation of care after discharge" (Sister, H1).

Neutral comments were that it was impossible to generalize (Patient H2 and SN, H1); and that relatives were "often peculiarly ambiguous" about participation (SNO, H2).

One negative comment was made by a patient in H2, who was also a medical student. He wrote:

"... whilst intervention and participation of relatives is on occasion desirable, in many cases relatives prove to be an uneducated nuisance"

A student nurse at H2 wrote:

"patients' relatives can become very interfering and since they do not always understand (even when explained to) the significance of nursing care, can undermine the work done by the staff and generally get in the way. This is only true of 2 to 5% of relatives".

8.7 CARE ACTIVITIES IN HOSPITAL

In this scale 20 common nursing procedures were listed. Nurses were asked to indicate by ticking boxes whether they considered that patients and/or relatives would be able to carry out each of the procedures. Patients and relatives were asked to indicate by ticking boxes whether each of the 20 procedures had been performed by the patient and/or relative during this study in hospital. Ticks were assigned a score of one and blanks were scored zero. Two cumulative scores were calculated for each subject; one for activities carried out by patients and one for activities carried out by relatives.

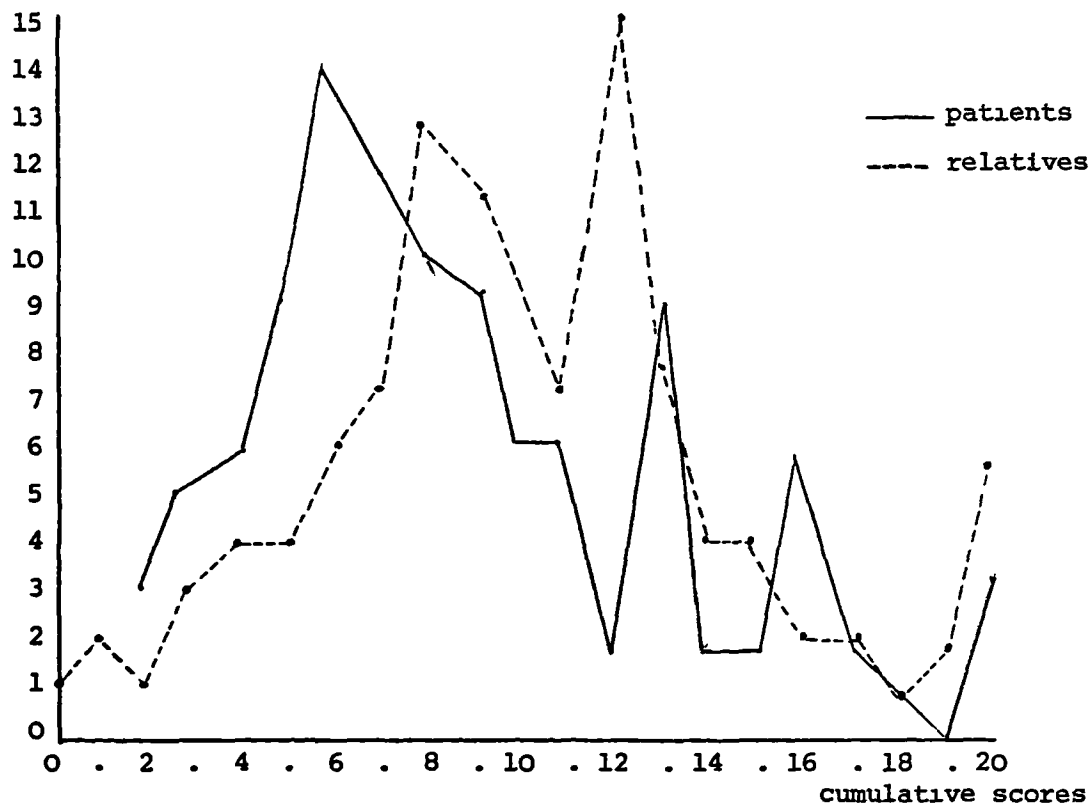
8.7.1 Data from nurses

Figure 8.20 See overleaf (p. 246).

Figure 8.20

Graph showing the distributions of nurses' cumulative scores for care activities which could be carried out by patients and by relatives

number of subjects



n = 107

mean cumulative scores - relatives 9.94, patients 8.81

standard deviation - relatives 4.51, patients 4.23

range - relatives 0 - 20, patients 2 - 20.

Independent t test showed a significant difference between the distribution of cumulative scores for patients and for relatives ($t = 2.81$, with 106 df, $p .006$.) It can therefore be seen that nurses reported that significantly more of the care activities could be carried out by relatives than by patients.

Table 8.38 - See overleaf (p. 247)

Table 8.38

Nurses' "care activities in hospital" scale. Absolute and percentage frequency with which nurses reported each item could be done by patients and relatives, showing mean score and standard deviation for each item

| Could be done by PATIENT | | | | | Could be done by RELATIVE | | | | |
|--------------------------|--------------------|------------|------------|------|---------------------------|--------------------|------------|------------|------|
| Item no. | frequency of ticks | % of ticks | mean score | S.D. | Item no. | frequency of ticks | % of ticks | mean score | S.D. |
| 1 | 90 | 84.1 | .84 | .37 | 1 | 31 | 29 | .29 | .46 |
| 2 | 92 | 86 | .86 | .35 | 2 | 46 | 43 | .43 | .49 |
| 3 | 104 | 97.2 | .97 | .17 | 3 | 86 | 80.4 | .8 | .39 |
| 4 | 99 | 92.5 | .93 | .26 | 4 | 68 | 63.6 | .64 | .48 |
| 5 | 34 | 31.8 | .32 | .47 | 5 | 38 | 35.5 | .35 | .48 |
| 6 | 7 | 6.5 | .07 | .25 | 6 | 8 | 7.5 | .08 | .26 |
| 7 | 59 | 55.1 | .55 | .5 | 7 | 102 | 95.3 | .95 | .21 |
| 8 | 84 | 78.5 | .79 | .41 | 8 | 97 | 90.7 | .91 | .29 |
| 9 | 39 | 36.4 | .36 | .48 | 9 | 84 | 78.5 | .79 | .41 |
| 10 | 52 | 48.6 | .49 | .5 | 10 | 23 | 21.5 | .22 | .41 |
| 11 | 36 | 33.6 | .33 | .48 | 11 | 21 | 19.6 | .19 | .39 |
| 12 | 12 | 11.2 | .11 | .32 | 12 | 43 | 40.2 | .4 | .49 |
| 13 | 39 | 36.4 | .36 | .48 | 13 | 14 | 13.1 | .13 | .34 |
| 14 | 59 | 55.1 | .55 | .5 | 14 | 93 | 86.9 | .87 | .34 |
| 15 | 34 | 31.6 | .32 | .47 | 15 | 50 | 46.7 | .47 | .5 |
| 16 | 24 | 22.4 | .22 | .42 | 16 | 73 | 68.2 | .68 | .47 |
| 17 | 28 | 26.2 | .26 | .44 | 17 | 93 | 86.9 | .87 | .34 |
| 18 | 22 | 20.6 | .2 | .4 | 18 | 25 | 23.4 | .23 | .42 |
| 19 | 18 | 16.8 | .17 | .38 | 19 | 54 | 50.5 | .5 | .5 |
| 20 | 11 | 10.3 | .1 | .3 | 20 | 13 | 12.1 | .12 | .32 |

(n = 107 nurses)

Differences in scores for patients and relatives on each item

It can be seen from Table 8.38 that patients were given higher mean scores than relatives on 8 items and relatives were given higher scores than patients on 12 items. Sign tests showed statistically significant differences ($p < .05$) between patients and relatives' scores on 16 of the 20 items. Items 5, 6, 18 and 20 did not have significant differences between scores for patients and relatives. Because of the low power efficiency of the sign test with

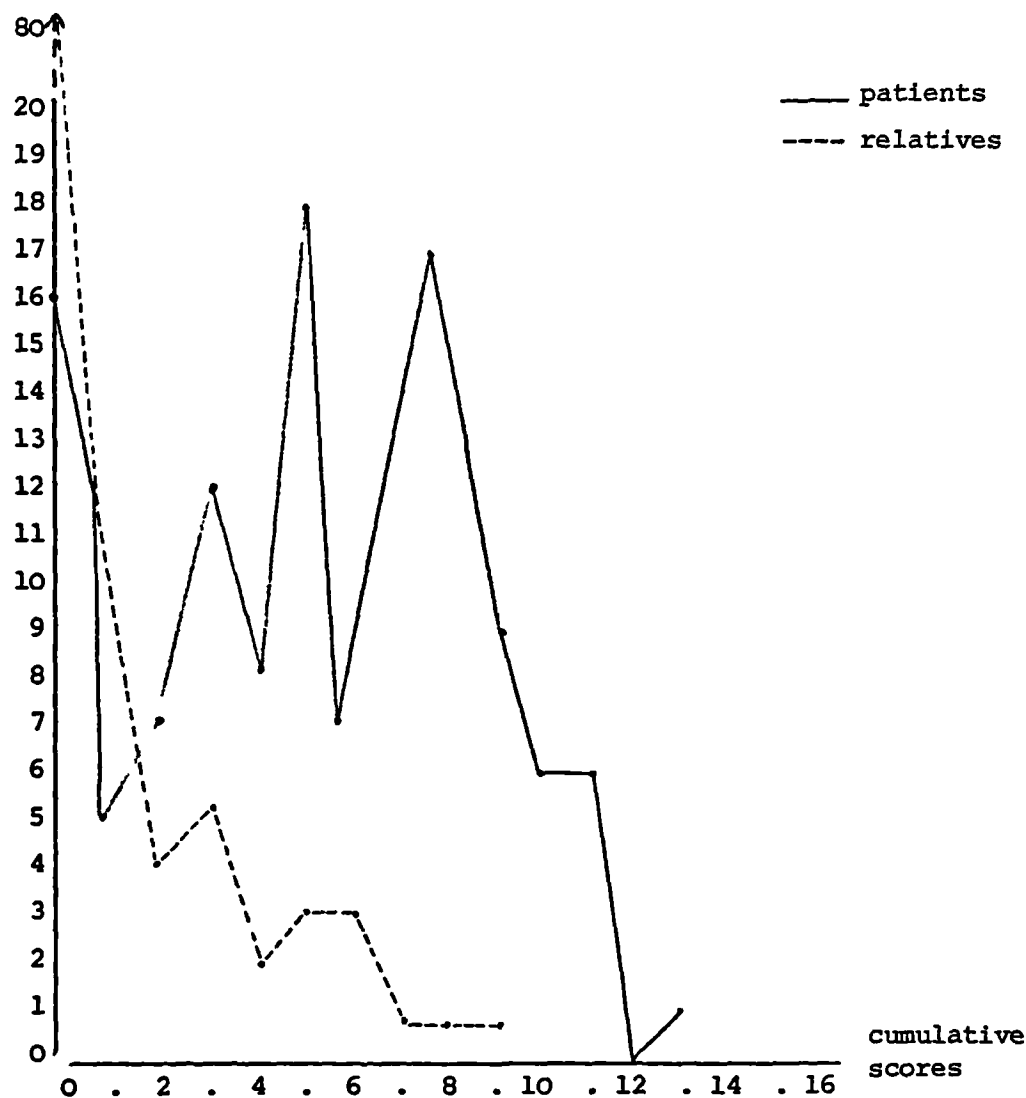
large samples (Siegel, 1956) related t tests were also computed. In summary statistically significant t values ($p < .05$) were found on the same 16 items as the sign test.

8.7.2 Data from patients

Figure 8.21

Distributions of patients' cumulative scores for care activities which could be carried out by patients and by relatives

number of subjects



n = 107

mean cumulative scores - relatives 0.88, patients 4.95

standard deviation - relatives 1.87, patients 3.22

range - relatives 0 - 9, patients 0 - 13.

Independent t test showed a significant difference between the distributions of cumulative scores for patients and for relatives (t 13.08 with 113 df, p .000). It can therefore be seen that patients reported that significantly more of the care activities were carried out by patients themselves than by their relatives. 82 of the 114 patients (71.9%) reported that none of the care activities were carried out by their relatives, whereas only 16 patients (14%) reported that they had not carried out any of the care activities themselves.

Table 8.39

Patients' "care activities in hospital" scale. Absolute and percentage frequencies with which patients reported each activity was carried out by patients and relatives, showing mean score and standard deviation for each item

| Care activity done by PATIENT | | | | |
|-------------------------------|--------------------|------------|------------|------|
| Item no. | frequency of ticks | % of ticks | mean score | S.D. |
| 1 | 12 | 10.5 | .11 | .31 |
| 2 | 15 | 13.2 | .13 | .34 |
| 3 | 74 | 64.9 | .65 | .48 |
| 4 | 86 | 75.4 | .75 | .43 |
| 5 | 18 | 15.8 | .16 | .37 |
| 6 | 6 | 5.3 | .05 | .22 |
| 7 | 69 | 60.5 | .61 | .49 |
| 8 | 79 | 69.3 | .69 | .46 |
| 9 | 46 | 40.4 | .4 | .49 |
| 10 | 4 | 3.5 | .03 | .18 |
| 11 | 2 | 1.8 | .02 | .13 |
| 12 | 8 | 7 | .07 | .26 |
| 13 | 5 | 4.4 | .04 | .21 |
| 14 | 23 | 20.2 | .2 | .4 |
| 15 | 29 | 25.4 | .25 | .44 |
| 16 | 32 | 28.1 | .28 | .45 |
| 17 | 24 | 21.1 | .21 | .41 |
| 18 | 3 | 2.6 | .03 | .16 |
| 19 | 25 | 21.9 | .22 | .42 |
| 20 | 4 | 3.5 | .03 | .18 |

| Care activity done by RELATIVE | | | | |
|--------------------------------|--------------------|------------|------------|------|
| Item no. | frequency of ticks | % of ticks | mean score | S.D. |
| 1 | 0 | 0 | 0 | 0 |
| 2 | 5 | 4.4 | .04 | .21 |
| 3 | 9 | 7.9 | .08 | .27 |
| 4 | 2 | 1.8 | .02 | .13 |
| 5 | 3 | 2.6 | .03 | .16 |
| 6 | 1 | .9 | .01 | .09 |
| 7 | 5 | 4.4 | .04 | .20 |
| 8 | 7 | 6.1 | .06 | .24 |
| 9 | 8 | 7 | .07 | .26 |
| 10 | 1 | .9 | .01 | .09 |
| 11 | 1 | .9 | .01 | .09 |
| 12 | 6 | 5.3 | .05 | .22 |
| 13 | 0 | 0 | 0 | 0 |
| 14 | 17 | 14.9 | .15 | .36 |
| 15 | 3 | 2.6 | .03 | .16 |
| 16 | 11 | 9.6 | .09 | .29 |
| 17 | 16 | 14 | .14 | .35 |
| 18 | 0 | 0 | 0 | 0 |
| 19 | 4 | 3.5 | .03 | .18 |
| 20 | 1 | .9 | .01 | .09 |

(n = 114 patients)

Difference in scores for patients and relatives on each item

It can be seen from Table 8.39 that on every item more patients have indicated that the care activity was carried out by patients themselves than by relatives. Sign tests showed statistically significant differences ($p < .05$) between patients' and relatives' scores on 11 of the 20 items, i.e. Items 1, 2, 3, 4, 5, 7, 8, 9, 15, 16 and 19. Related t tests were also computed. In summary statistically significant t values ($p < .05$) were found on the same items as

for the sign test, except that Item 1 did not achieve significance, whereas Item 6 was statistically significant.

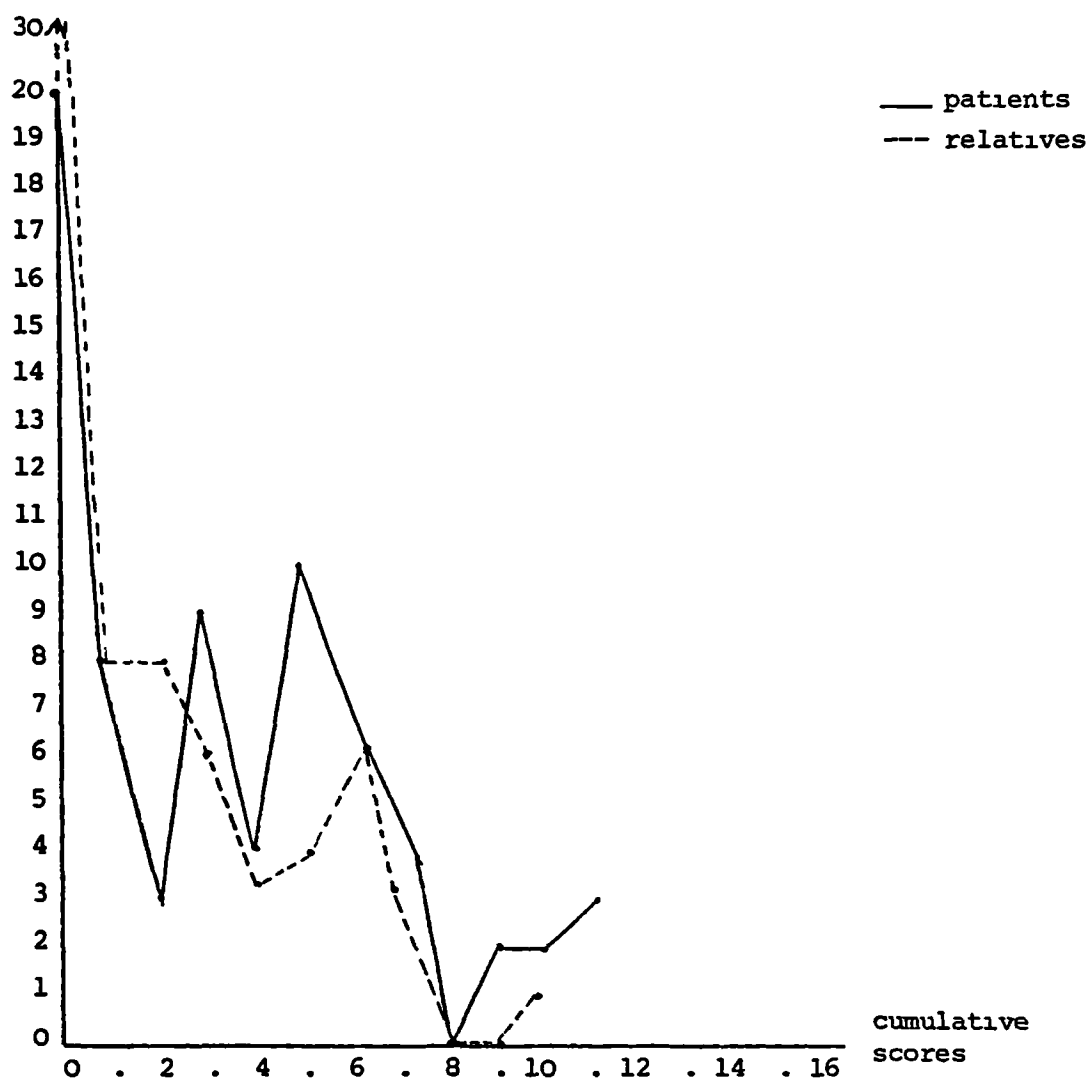
Patients who reported that they had carried out much self-care (i.e. high cumulative score for patients) tended to have more educational qualifications (χ^2 72.33 with 48 df, p .01). Similarly, patients who reported that their relatives had assisted in their care (high cumulative score for relatives) tended to have more educational qualifications (χ^2 55.09 with 36 df, p .02).

8.7.3 Data from relatives

Figure 8.22

Distribution of relatives' cumulative scores for care activities which could be carried out by patients and by relatives

number of subjects



$n = 72$

mean cumulative scores - relatives 1.96, patients 3.36

standard deviation - relatives 2.46, patients 3.23

range - relatives 0 - 10, patients 0 - 11.

Independent t test (2 tailed) showed a significant difference between the distributions of cumulative scores for patients and relatives (t 3.20 with

71 df, $p .002$). It can therefore be seen that relatives reported that significantly more of the care activities were carried out by patients than by relatives themselves. 33 of the 72 relatives (45.8%) reported that none of the care activities were carried out by relatives, whereas 21 relatives (29.2%) reported that none of the activities were carried out by patients.

Table 8.40

Relatives' "care activities in hospital" scale. Absolute and percentage frequencies with which relatives reported each item was carried out by patients and relatives, showing mean score and standard deviation for each item.

| Care activity done by PATIENT | | | | | Care activity done by RELATIVE | | | | |
|-------------------------------|--------------------|------------|------------|------|--------------------------------|--------------------|------------|------------|------|
| Item no. | frequency of ticks | % of ticks | mean score | S.D. | Item no. | frequency of ticks | % of ticks | mean score | S.D. |
| 1 | 5 | 6.9 | .07 | .25 | 1 | 0 | 0 | 0 | 0 |
| 2 | 8 | 11.1 | .11 | .32 | 2 | 3 | 4.2 | .04 | .2 |
| 3 | 28 | 38.9 | .39 | .49 | 3 | 15 | 20.8 | .21 | .41 |
| 4 | 43 | 59.7 | .59 | .49 | 4 | 2 | 2.8 | .03 | .16 |
| 5 | 5 | 6.9 | .07 | .25 | 5 | 1 | 1.4 | .01 | .12 |
| 6 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| 7 | 34 | 47.2 | .47 | .5 | 7 | 10 | 13.9 | .14 | .35 |
| 8 | 40 | 55.6 | .55 | .5 | 8 | 13 | 18.1 | .18 | .39 |
| 9 | 15 | 20.8 | .21 | .41 | 9 | 10 | 13.9 | .14 | .35 |
| 10 | 2 | 2.8 | .03 | .16 | 10 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 |
| 12 | 5 | 6.9 | .07 | .25 | 12 | 7 | 9.7 | .09 | .29 |
| 13 | 2 | 2.8 | .03 | .16 | 13 | 0 | 0 | 0 | 0 |
| 14 | 15 | 20.8 | .21 | .41 | 14 | 26 | 36.1 | .36 | .48 |
| 15 | 11 | 15.3 | .15 | .36 | 15 | 4 | 5.6 | .05 | .23 |
| 16 | 17 | 23.6 | .24 | .43 | 16 | 16 | 22.2 | .22 | .42 |
| 17 | 18 | 25 | .26 | .44 | 17 | 26 | 36.1 | .36 | .48 |
| 18 | 0 | 0 | 0 | 0 | 18 | 1 | 1.4 | .01 | .12 |
| 19 | 9 | 12.5 | .12 | .33 | 19 | 5 | 6.9 | .07 | .25 |
| 20 | 1 | 1.4 | .01 | .12 | 20 | 0 | 0 | 0 | 0 |

(n = 72 relatives)

Differences in scores for patients and relatives on each item

It can be seen from Table 8.40 that on 14 of the 20 items more relatives indicated that the care activity was carried out by patients than by relatives

themselves. More relatives reported that they carried out the activity rather than patients on 4 items. Two items were not ticked as done by either patients or relatives. Sign tests showed statistically significant differences ($p < .05$) between patients' and relatives' scores on 6 of the 20 items i.e. Items 3, 4, 7, 8 and 15 (patients' scores higher than relatives') and Item 14 (relatives' scores higher than patients'). Independent t tests were also computed. In summary, statistically significant t values ($p < .05$) were found on the same items and Item 5 ($t = 2.04$ with 71 df, $p = .045$).

Relatives who reported that they had carried out a lot of care, tended to be in the younger age groups ($\chi^2 = 29.75$ with 16 df, $p = .009$). Similarly, relatives who reported that the patient had carried out much self-care tended to be young ($\chi^2 = 31.82$ with 20 df, $p = .045$).

8.7.4 Comparison of data from nurses, patients and relatives

Table 8.41

"Care activities in hospital" scale. Percentage of subjects who responded that the care activity was done (patients and relatives) or could be done (nurses) by a patient or relative.

| Care activity number | RELATIVES activity done by patient | PATIENTS activity done by patient | NURSES activity could be done by patient | RELATIVES activity done by relative | PATIENTS activity done by relative | NURSES activity could be done by relative |
|----------------------|------------------------------------|-----------------------------------|------------------------------------------|-------------------------------------|------------------------------------|-------------------------------------------|
| 1 | 6.9 | 10.5 | 84.1 | 0 | 0 | 29 |
| 2 | 11.1 | 13.2 | 86 | 4.2 | 4.4 | 43 |
| 3 | 38.9 | 64.9 | 97.2 | 20.8 | 7.9 | 80.4 |
| 4 | 59.7 | 75.4 | 92.5 | 2.8 | 1.8 | 63.6 |
| 5 | 6.9 | 15.8 | 31.8 | 1.4 | 2.6 | 35.5 |
| 6 | 0 | 15.8 | 6.5 | 0 | .9 | 7.5 |
| 7 | 47.2 | 60.5 | 55.1 | 13.9 | 4.4 | 95.3 |
| 8 | 55.6 | 69.3 | 78.5 | 18.1 | 6.1 | 90.7 |
| 9 | 20.8 | 40.4 | 36.4 | 13.9 | 7 | 78.5 |
| 10 | 2.8 | 3.5 | 48.6 | 0 | .9 | 21.5 |
| 11 | 0 | 1.8 | 33.6 | 0 | .9 | 19.6 |
| 12 | 6.9 | 7 | 11.2 | 9.7 | 5.3 | 40.2 |
| 13 | 2.8 | 4.4 | 36.4 | 0 | 0 | 13.1 |
| 14 | 20.8 | 20.2 | 55.1 | 36.1 | 14.9 | 86.9 |
| 15 | 15.3 | 25.4 | 31.6 | 5.6 | 2.6 | 46.7 |
| 16 | 23.6 | 28.1 | 22.4 | 22.2 | 9.6 | 68.2 |
| 17 | 25 | 21.1 | 25.2 | 36.1 | 14 | 86.9 |
| 18 | 0 | 2.6 | 20.6 | 1.4 | 0 | 23.4 |
| 19 | 12.5 | 21.9 | 16.8 | 6.9 | 3.5 | 50.5 |
| 20 | 1.4 | 3.5 | 10.3 | 0 | .9 | 12.1 |

Table 8.41 summarises data from the three subject groups. On every item it can be seen that more patients reported that care activities were carried out by patients themselves rather than by relatives. On 14 of the items more relatives reported that care activities were carried out by patients than by relatives. According to the relatives, two of the activities were never done by patients or relatives. Nurses reported that seven of the activities could be carried out more by patients than by relatives, and 13 of the activities could be carried out more by relatives than by patients.

On every item more nurses wrote that the care activity could be done by a relative, than either patients or relatives reported it done by relatives. Similarly, on 15 of the 20 items it can be seen that more nurses wrote that the activity could be done by patients than either patients or relatives reported it actually done by patients. These differences among the subject groups were statistically significant ($p < .001$) as shown in Table 8.42.

Table 8.42

Mean cumulative scores for each subject group, showing summary results of one-way ANOVA.

| | Nurse subjects | Patient subjects | Relative subjects | F ratio | probability |
|--------------------------------------------|----------------|------------------|-------------------|---------|-------------|
| activities done/could be done by PATIENTS | 8.81 | 4.95 | 3.36 | 56.09 | .0000 |
| activities done/could be done by RELATIVES | 9.93 | 0.88 | 1.96 | 249.03 | .0000 |

Tables 8.43 and 8.44 show the mean scores for each subject group and each item. One way ANOVA revealed statistically significant differences among the subject groups on 14 of the 20 items concerning patient participation at $p < .05$ (Table 8.43) and on all 20 items concerning relative participation at $p < .01$ (Table 8.44). It can be seen that nurses had the highest mean scores on 13 of the 14 statistically significant items concerning patient participation. Patients obtained the highest scores only on Item 9 "Helped me to walk to the toilet" (Table 8.43). Nurses obtained the highest mean scores on all 20 items concerning relative participation (Table 8.44).

Tables 8.43 and 8.44 see overleaf (pp. 254, 255)

Table 8.43

Mean scores for each subject group on each item concerning activities done/ could be done by patients, showing summary results of one way ANOVA with group as dependent variable.

| care activity number | mean score - patients | | | F ratio | probability |
|----------------------|-----------------------|----------|-----------|---------|-------------|
| | nurses | patients | relatives | | |
| 1 | .84 | .11 | .07 | 186.75 | .000 |
| 2 | .86 | .13 | .11 | 161.65 | .000 |
| 3 | .97 | .65 | .39 | 47.84 | .000 |
| 4 | .93 | .75 | .59 | 14.98 | .000 |
| 5 | .32 | .16 | .07 | 9.79 | .000 |
| 6 | .07 | .05 | 0 | 2.34 | .099 NS |
| 7 | .55 | .61 | .47 | 1.58 | .207 NS |
| 8 | .78 | .69 | .55 | 5.47 | .005 |
| 9 | .36 | .40 | .21 | 4.01 | .019 |
| 10 | .49 | .03 | .03 | 62.33 | .000 |
| 11 | .34 | .02 | 0 | 40.49 | .000 |
| 12 | .11 | .07 | .07 | .77 | .462 NS |
| 13 | .36 | .04 | .03 | 33.44 | .000 |
| 14 | .55 | .20 | .21 | 20.93 | .000 |
| 15 | .32 | .25 | .15 | 3.14 | .045 |
| 16 | .22 | .28 | .24 | .51 | .602 NS |
| 17 | .26 | .21 | .25 | .43 | .653 NS |
| 18 | .21 | .03 | 0 | 17.55 | .000 |
| 19 | .17 | .22 | .12 | 1.39 | .250 NS |
| 20 | .10 | .03 | .01 | 4.05 | .018 |

Table 8.44

Mean scores for each subject group on each item concerning activities done/ could be done by relatives, showing summary results of one way ANOVA with group as dependent variable .

| care activity number | mean scores - relatives | | | F ratio | probability |
|----------------------|-------------------------|----------|-----------|---------|-------------|
| | nurses | patients | relatives | | |
| 1 | .29 | 0 | 0 | 37.55 | .000 |
| 2 | .43 | .04 | .04 | 43.52 | .000 |
| 3 | .80 | .08 | .21 | 123.93 | .000 |
| 4 | .63 | .01 | .02 | 129.43 | .000 |
| 5 | .35 | .03 | .01 | 38.62 | .000 |
| 6 | .07 | .01 | 0 | 5.71 | .004 |
| 7 | .95 | .04 | .14 | 416.22 | .000 |
| 8 | .91 | .06 | .18 | 242.64 | .000 |
| 9 | .78 | .07 | .14 | 137.69 | .000 |
| 10 | .22 | .01 | 0 | 22.74 | .000 |
| 11 | .19 | .01 | 0 | 20.11 | .000 |
| 12 | .40 | .05 | .09 | 29.11 | .000 |
| 13 | .13 | 0 | 0 | 13.85 | .008 |
| 14 | .87 | .15 | .36 | 99.35 | .000 |
| 15 | .47 | .03 | .05 | 54.71 | .000 |
| 16 | .68 | .09 | .22 | 64.55 | .000 |
| 17 | .87 | .14 | .36 | 103.17 | .000 |
| 18 | .23 | 0 | .01 | 25.54 | .000 |
| 19 | .50 | .03 | .07 | 58.37 | .000 |
| 20 | .12 | .01 | 0 | 10.74 | .000 |

8.7.5 Subjects' comments on "care activities in hospital" scale

At the end of this one page scale, which was similar for all subjects, was written: "If you wish to make any general comments, please use the space below". 40 (13.7%) of the subjects wrote comments, of whom 33 were nurses, 5 were patients and 2 were relatives. Thus 30.8% of the nurses, 4.4% of the patients and 2.8% of the relatives commented. The high proportion of nurses who wrote comments testifies to their interest in the subject.

Relatives' comments

One relative in H1 commented on the low priority given by nurses to personal hygiene, which was not relevant to this study. Another relative at H2 wrote "I would have been happy and willing to do these things, but was never invited by the nurses".

Patients' comments

Opposing views about self-care were expressed by patients. Three expressed support for a passive role for patients. This was exemplified by the view of a patient in H2 who wrote:

"While in hospital I put myself in the doctor and sister and nursing staff (sic) care and have done so for 47 years. When I leave first my mother then my husband take over my care... but when in hospital it is expert care I need and come for".

Two patients at H2 expressed positive views about self-care, but with reservations, e.g.:

"As the nursing staff in general are overworked, I think it is a good thing for mobile patients to do little chores to help as long as they do not get under the staff's feet, helping with morning tea and evening drinks, tidy beds, etc."

Nurses' comments on specific items

Item 1. "Filling in the fluid chart"

Three nurses agreed this could be done by a patient or relative under certain conditions such as "if patient well enough and can be trusted" (SN at H2); "if patient... understands how to measure intake and output" (Sister at H1); and for an "adult relative for a child patient" (SNO at H1).

Item 2. "Applying ointment to the patient's skin"

There was recognition that "patients with skin complaints often have systems of putting ointment on far better than devised by nurses" (SN at H2). Another SN at H2 added it "depends on closeness of relative".

Item 3. "Dressing or undressing the patient"

A SN at H2 wrote that she would "only allow help of relative if patient wanted this"

Item 7. "Helping the patient to eat or drink".

2 SNs at H2 considered that relative assistance would be acceptable if "patient has no difficulty with swallowing etc." and "if relative would be accurate in reporting".

Item 10. "Testing the urine"

3 nurses specified conditions under which patient and relative participation would be acceptable i.e. "if patient is diabetic" (Sister at H1); "if adequately taught and emotionally accepting" (SNO at H1); and "... if this was to be continued at home and I would ensure it was done under supervision at first" (Sister at H1).

Item 11. "Giving an injection"

3 nurses (a sister and SNO at H1 and a student nurse at H2), commented that this would only be encouraged if the patient was a diabetic on long-term insulin therapy.

Item 13. "Giving a suppository"

A SN at H2 wrote that this "would be supervised by a nurse if done by patient".

Item 18 "Putting in ear-drops or eye-drops"

A sister at H1 wrote that the "patient or relative is taught if treatment is to continue at home".

Nurses' general comments

26 general comments were categorised into broadly positive, negative and neutral comments, then divided into themes. Some lengthy comments contained several themes.

Figure 8.23 See over (p. 258)

Figure 8.23

Classification of nurses' general comments on "care activities in hospital" scale

| |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>POSITIVE COMMENTS i.e. patients and relatives could or should carry out most of these activities in hospital</p> <ul style="list-style-type: none"> - "especially in chronic conditions" (NO at H1, SN at H2, SNO at H2 and Sister at H2) - "especially if relatives will have to continue care at home" (2 NO's at H1, NO at H2, SN at H1 and sister at H1) - nurses should teach care skills to patients and relatives (SNO at H2, SN at H2 and NO at H1) - good for relatives' morale (sister at H2) - relatives need to be encouraged/given permission (2 sisters at H2) - nurses should supervise patient self-care and relative care (sister at H2) |
| <p>NEGATIVE COMMENTS i.e. patients and relatives should not carry out these activities in hospital</p> <ul style="list-style-type: none"> - "it is the nurse's job" (pupil nurse at H2) - "only nurses know how to chart and communicate what has been done" (student nurse at H2) - "relatives may need a break while patient is in hospital, especially if they care for the patient at home" (sister at H2) - problems of accident/injury/legal problems and compensation (student nurse at H2, sister at H1 and SN at H2) |
| <p>NEUTRAL COMMENTS</p> <ul style="list-style-type: none"> - "OK but patients and relatives should not be pressured to participate" (student nurse at H2) - "depends on condition of patients and relatives" (NO at H2, sister at H2 and SN at H1) - "problem of feasibility re relatives' other commitments, visiting times" (sister at H2) - "appropriateness of participation to be assessed by senior ward nurse" (NO at H2 and SN at H2) |

8.8 NURSING PROCESS DATA

8.8.1 Measurement of the use of nursing process in wards

The scores obtained by each of the 16 wards on each item of the NP scale are shown in Table 8.45. The total scores for each ward were ranked and the wards were equally divided into four categories, so that category 1 indicated minimum use of NP whereas category 4 indicated maximum use of NP.

Table 8.45

Nursing process scores for each ward

| Item no. | Hospital 1 | | | | | | Hospital 2 | | | | | | | | | | Total for each item | Ranks (1=low) |
|----------|------------|--------|---|---|---|---|------------|--------|---|---|---|---|---|---|---|----|---------------------|---------------|
| | Ward 1 | Ward 2 | 3 | 4 | 5 | 6 | Ward 1 | Ward 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 30 | 38 |
| 2 | 1 | 1 | 2 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 18 | 28 |
| 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 32 | 40 |
| 4 | 2 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 17 | 24 |
| 5 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 0 | 2 | 2 | 1 | 0 | 25 | 35.5 |
| 6 | 2 | 2 | 2 | 0 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 27 | 37 |
| 7 | 2 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 25 | 35.5 |
| 8 | 2 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 0 | 23 | 33 |
| 9 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 31 | 39 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 0 | 18 | 28 |
| 11 | 2 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 16 | 22 |
| 12 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 24 | 34 |
| 13 | 2 | 2 | 2 | 1 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 17 | 24 |
| 14 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 11 | 19 |
| 15 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 9 | 15.5 |
| 16 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 4 | 8 |
| 17 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 7 | 13 |
| 18 | 2 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 18 | 28 |
| 19 | 2 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 14 | 21 |
| 20 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 9 | 15.5 |
| 21 | 2 | 1 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 2 | 1 | 2 | 1 | 18 | 28 |
| 22 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 8 | 14 |
| 23 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 11 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 25 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 |
| 26 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 |

(cont. over...)

Table 8.45 (cont'd)

Nursing process scores for each ward

| Item no. | Hospital 1 | | | | | | Hospital 2 | | | | | | | | | | Total for each item | Ranks (1=low) |
|----------|---------------------------------------------------|---|---|---|---|---|------------|---|---|---|---|---|---|---|---|----|---------------------|---------------|
| | Ward 1 | 2 | 3 | 4 | 5 | 6 | Ward 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| 27 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 |
| 28 | 2 | 2 | 2 | 0 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | 18 | 28 |
| 29 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 8 |
| 30 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 12 | 20 |
| 31 | 1 | 2 | 2 | 0 | 1 | 2 | 2 | 1 | 2 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 19 | 31 |
| 32 | ----- scores excluded - see Section 7.1.6.2 ----- | | | | | | | | | | | | | | | | | |
| 33 | 1 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 17 | 24 |
| 34 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 10 | 17.5 |
| 35 | ----- scores excluded ----- | | | | | | | | | | | | | | | | | |
| 36 | ----- scores excluded ----- | | | | | | | | | | | | | | | | | |
| 37 | 2 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | 1 | 1 | 20 | 32 |
| 38 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 10 | 17.5 |
| 39 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 6 | 11 |
| 40 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 |
| 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 42 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 8 |
| 43 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 6 | 11 |

| | Hospital 1 | | | | | | Hospital 2 | | | | | | | | | | |
|-----------------------|------------|----|------|----|----|----|------------|-----|----|----|----|----|----|-----|----|----|--|
| | Ward 1 | 2 | 3 | 4 | 5 | 6 | Ward 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Total for each ward | 44 | 50 | 54 | 11 | 21 | 19 | 54 | 27 | 51 | 42 | 23 | 30 | 41 | 27 | 29 | 18 | |
| Ranking (1=low) | 12 | 13 | 15.5 | 1 | 4 | 3 | 15.5 | 6.5 | 14 | 11 | 5 | 9 | 10 | 6.5 | 8 | 2 | |
| Categories 1,2,3 or 4 | 3 | 4 | 4 | 1 | 1 | 1 | 4 | 2 | 4 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | |

Table 8.46

Wards assigned to each of the 4 categories to indicate extent of use of NP.

| Category | Hospital (H) and Ward (W) | Total score | Type of ward |
|------------------------------------------|------------------------------|-------------|--------------|
| 4 (maximum use of nursing process) | H2 W1 | 54 | medical |
| | H1 W3 | 54 | medical |
| | H2 W3 | 51 | surgical |
| | H1 W2 | 50 | medical |
| 3 | H1 W1 | 44 | medical |
| | H2 W4 | 42 | surgical |
| | H2 W7 | 41 | surgical |
| | H2 W6 | 30 | surgical |
| 2 | H2 W9 | 29 | medical |
| | H2 W8 | 27 | medical |
| | H2 W2 | 27 | surgical |
| | H2 W5 | 23 | surgical |
| 1 (minimum use of nursing process) | H1 W5 | 21 | surgical |
| | H1 W6 | 19 | surgical |
| | H2 W10 | 18 | medical |
| | H1 W4 | 11 | medical |

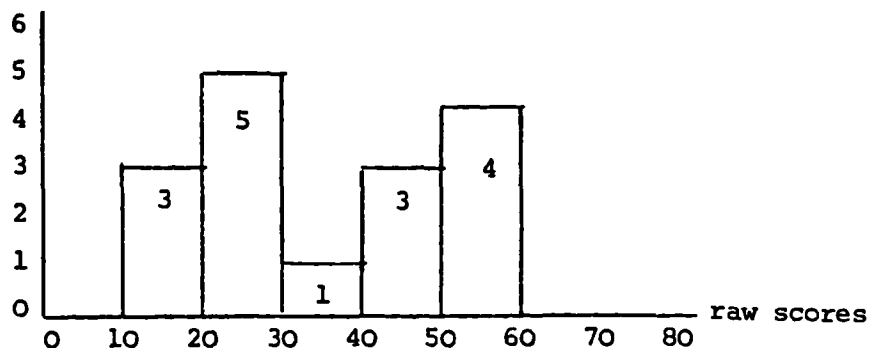
The wards were briefly described in Figures 7.1 and 7.2. The researcher's observations and comments from sisters and NO's about the wards were found to be fairly accurate predictors of the rank order of NP scores across the 16 wards. Although anecdotal, this does provide further confirmation of the validity of the NP measuring instrument.

There were no statistically significant distribution patterns either between the 2 hospitals or between medical and surgical wards in the rank order of total NP scores (one sample runs tests).

Figure 8.24

Distribution of raw scores for the use of NP in wards

number of wards



possible range of NP scores 0 to 80

actual range 11 to 57

mean 33.8

standard deviation 14.13.

It can be seen from Figure 8.24 that the 16 wards produced total NP scores across 57% of the possible distribution. No wards scored in the bottom 14% of the distribution, which is unsurprising as both hospitals were attempting to develop NP which probably influenced even the wards with the lowest scores. No wards scored in the top 29% of the distribution, which indicates that none of the wards were using NP fully.

If the 16 wards are considered as a single entity, it is possible to identify from Table 8.45 the rank order of total scores for each item on the NP scale. This indicates the pattern of development of the use of NP in these wards and suggests which aspects of NP were found most easy and most difficult to implement.

Table 8.47

Items in the nursing process scale in rank order of total scores, from highest to lowest. (see Appendix Part 3 Number 7 for list of items)

| Rank | Number of items | Summary description | Total score |
|------|-----------------|-------------------------|-------------|
| 40 | 3 | general points | 32 |
| 39 | 9 | assessment | 31 |
| 38 | 1 | general points | 30 |
| 37 | 6 | assessment | 27 |
| 35.5 | { 5 | assessment | { 25 |
| | { 7 | assessment | |
| 34 | 12 | assessment | 24 |
| 33 | 8 | assessment | 23 |
| 32 | 37 | implementation | 20 |
| 31 | 31 | implementation | 19 |
| | { 21 | care planning | { |
| | { 28 | planned nursing actions | |
| 28 | { 18 | care planning | { 18 |
| | { 10 | assessment | |
| | { 2 | general points | { |
| | { 33 | implementation | |
| 24 | { 4 | general points | { 17 |
| | { 13 | problem identification | |
| 22 | 11 | assessment | 16 |
| 21 | 19 | care planning | 14 |
| 20 | 30 | planned nursing actions | 12 |
| 19 | 14 | problem identification | 11 |
| 17.5 | { 38 | evaluation | { 10 |
| | { 34 | implementation | |
| 15.5 | { 20 | care planning | { 9 |
| | { 15 | problem identification | |

Table 8.47 (cont'd)

| Rank | Number of items | Summary description | Total score |
|------|-----------------|-------------------------|-------------|
| 14 | 22 | goal setting | 8 |
| 13 | 17 | problem identification | 7 |
| 11 | { 43 | evaluation | 6 |
| | { 39 | evaluation | |
| | { 23 | goal setting | |
| 8 | { 16 | problem identification | 4 |
| | { 42 | evaluation | |
| | { 29 | planned nursing actions | |
| 6 | 27 | goal setting | 3 |
| 4 | { 40 | evaluation | 2 |
| | { 25 | goal setting | |
| | { 26 | goal setting | |
| 2 | 24 | goal setting | 1 |
| 1 | 41 | evaluation | 0 |

Some clear patterns emerge from Table 8.47. Items concerning general points (1 to 4) are in the top half of the ranks. Items concerning assessment (5 to 12) are also in the top half of the ranks. Problem identification items (13 to 17), and care planning items (18 to 21) are all in the two middle quartiles. Items concerning goal setting (22 to 27) are in the bottom half of the ranks. Items concerning planned nursing actions (28 to 30) are in the two middle quartiles. Implementation items (31, 33, 34 and 37) are mostly in the top half of the ranks. Evaluation items (38 to 43) are all in the bottom half of the ranks.

It thus appears that the order in which various aspects of NP were developed in these 16 wards was: firstly general points and assessment; then implementation of care; followed by problem identification, care planning and planned nursing actions; and lastly goal setting and evaluation.

8.8.2 Differences among wards according to the use of NP

Table 8.48

Distribution of subjects in wards according to NP scores

| Ward scores for use of NP | nurses | patients | relatives |
|---------------------------|------------|------------|------------|
| 1 (minimum use) | 35 (32.7%) | 26 (22.8%) | 11 (15.3%) |
| 2 | 19 (17.8%) | 24 (21.1%) | 19 (26.4%) |
| 3 | 21 (19.6%) | 27 (23.7%) | 17 (23.6%) |
| 4 (maximum use) | 32 (29.9%) | 37 (32.4%) | 25 (34.7%) |
| | 107 (100%) | 114 (100%) | 72 (100%) |

There was a reasonable spread of subjects across the wards at various levels of use of NP.

Ward NP scores were cross-tabulated with other variables to investigate relationships between the use of NP and other measures. Nurses in wards with high scores tended to obtain high scores on the "patient implementation" subscale of the "attitudes towards patient and family participation in care" scale. Patients in high scoring wards tended to score highly on the "patient planning" subscale. However, no other statistically significant associations were found for any of the subject groups.

8.8.3 Nurses' familiarity with the nursing process

There were 5 questions designed to assess familiarity with NP (see Appendix Part 2 Number 2) and from which a cumulative score was derived. (Percentages are rounded to the nearest whole number).

Table 8.49

Time spent working on wards in which the nursing process was used

Answered by ward-based nurses only.

| response | number | percentage |
|--------------------|--------|------------|
| none | 22 | 27 |
| less than 2 months | 25 | 30 |
| 2 to 6 months | 25 | 30 |
| 7 to 12 months | 6 | 7 |
| more than a year | 5 | 6 |
| total | 83 | 100% |

Table 8.50

Time directly concerned with nursing process in unit or area

Answered by nursing officers and above only

| response | number | percentage |
|--------------------|--------|------------|
| none | 6 | 25 |
| less than 2 months | 4 | 16.5 |
| 2 to 6 months | 5 | 21 |
| 7 to 12 months | 5 | 21 |
| more than a year | 4 | 16.5 |
| total | 24 | 100% |

Table 8.51Number of books or articles about the nursing process read

| response | number | percentage |
|-----------|--------|------------|
| none | 29 | 27 |
| 1 or 2 | 61 | 57 |
| 3 or more | 17 | 16 |
| total | 107 | 100% |

Table 8.52Nurses' response to question: "In your current position, are you encouraged to read about the nursing process ?"

| response | number | percentage |
|--------------------------|--------|------------|
| no, not really | 45 | 42 |
| yes, to a certain extent | 40 | 37 |
| yes, very much | 22 | 21 |
| total | 107 | 100% |

Table 8.53Number of lectures, study days, discussions or seminars on the nursing process attended.

| response | number | percentage |
|----------|--------|------------|
| none | 28 | 26 |
| one | 49 | 46 |
| several | 30 | 28 |
| total | 107 | 100% |

Tables 8.49 to 8.53 show that the nurses generally had little familiarity with NP. Of those who were ward-based, more than half (57%) had worked on NP wards for less than 2 months, if at all. Only 13% had worked on NP wards for more than 6 months. Those of NO grade and above claimed more direct involvement with NP in their units than the ward-based nurses. Only 36.5% claimed less than 2 months direct involvement and 36.5% claimed to have been involved with NP for more than 6 months.

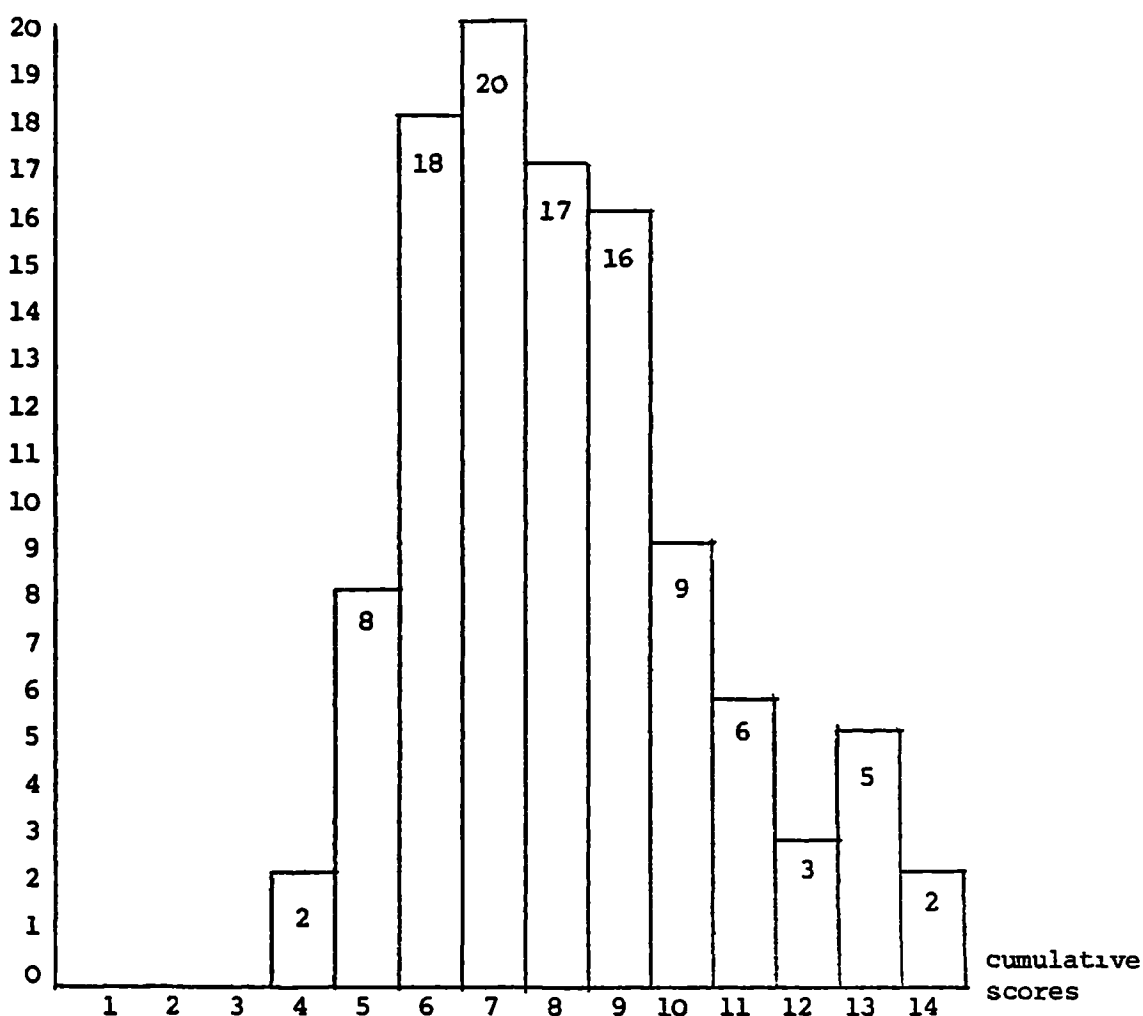
Most nurses had read very little about NP. Only 16% claimed to have read 3 or more books or articles on the subject and 27% claimed to have read nothing. This may be associated with the findings that nearly half (42%) of the nurses reported that they were not encouraged to read about NP. A quarter (26%) of the nurses had attended no teaching sessions on NP, but another quarter (28%) claimed to have attended several.

A cumulative score for each nurse was calculated from responses to the questions above. A low cumulative score indicated little familiarity with NP and a high cumulative score indicated a high level of familiarity with NP.

Figure 8.25

Cumulative scores for nurses' familiarity with the nursing process

number of subjects



$n = 106$ (one subject's score lost due to punching error)

minimum score 4, maximum score 14, range 10, mean 8.31.

Higher cumulative scores for familiarity with the NP were associated with more senior grades (χ^2 55.28, with 33 df, p .009) and with older age groups (χ^2 69.11 with 22 df, p .000). Cross-tabulations revealed no significant associations with other variables.

8.8.4 Nurses' attitudes towards the nursing process. Subjects were asked to rate the effect of NP on each of 11 items by ticking one of the 6 response categories ranging from "very good" to "very bad".

Table 8.54.

Nurses' attitudes towards the nursing process: Number and percentage (corrected to nearest whole number) of responses in each response category and mean score and standard deviation for each item (n = 107).

| | 6 very good | 5 good | 4 no effect | 3 don't know | 2 bad | 1 very bad | 0 no answer | mean | s.D. |
|------------------------------------------|-------------------|-----------|-------------------|--------------------|----------|------------------|-------------------|------|------|
| 1. Patients' emotional well-being | 15 (14%) | 50 (47%) | 22 (20%) | 19 (18%) | 1 (1%) | 0 (0%) | 0 (0%) | 4.55 | .97 |
| 2. Nurses' learning opportunities | 37 (35%) | 49 (46%) | 10 (9%) | 11 (10%) | 0 (0%) | 0 (0%) | 0 (0%) | 5.05 | .92 |
| 3. The nurse-patient relationship | 29 (27%) | 57 (53%) | 15 (14%) | 6 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 5.02 | .8 |
| 4. The doctors' work | 7 (6%) | 29 (27%) | 35 (33%) | 34 (32%) | 2 (2%) | 0 (0%) | 0 (0%) | 4.05 | .96 |
| 5. The overall standard of nursing care | 28 (26%) | 48 (45%) | 20 (19%) | 11 (10%) | 0 (0%) | 0 (0%) | 0 (0%) | 4.87 | .92 |
| 6. Sisters' job satisfaction | 20 (19%) | 33 (31%) | 15 (14%) | 35 (32%) | 4 (4%) | 0 (0%) | 0 (0%) | 4.28 | 1.21 |
| 7. Ward atmosphere and morale | 16 (15%) | 39 (36%) | 32 (30%) | 18 (17%) | 2 (2%) | 0 (0%) | 0 (0%) | 4.46 | 1.01 |
| 8. Patients' physical well-being | 23 (22%) | 49 (46%) | 23 (21%) | 11 (10%) | 0 (0%) | 0 (0%) | 1 (1%) | 4.75 | 1.01 |
| 9. Relatives' contentment and well-being | 17 (16%) | 33 (31%) | 33 (31%) | 23 (21%) | 0 (0%) | 0 (0%) | 1 (1%) | 4.37 | 1.09 |
| 10. Nurses' job satisfaction | 26 (24%) | 48 (45%) | 16 (15%) | 13 (12%) | 3 (3%) | 0 (0%) | 1 (1%) | 4.72 | 1.14 |
| 11. Time spent on paperwork | 6 (6%) | 23 (22%) | 18 (17%) | 25 (22%) | 30 (28%) | 5 (5%) | 0 (0%) | 3.39 | 1.37 |

It can be seen that the nurses expressed generally positive attitudes towards the NP. Aspects of care about which subjects considered NP had most beneficial effects were from highest mean score downwards:

- Item 2 Nurses' learning opportunities;
- Item 3 The nurse-patient relationship; and
- Item 5 The overall standard of nursing care.

Aspects of care about which subjects thought NP had least beneficial effects were (from lowest mean score upwards):

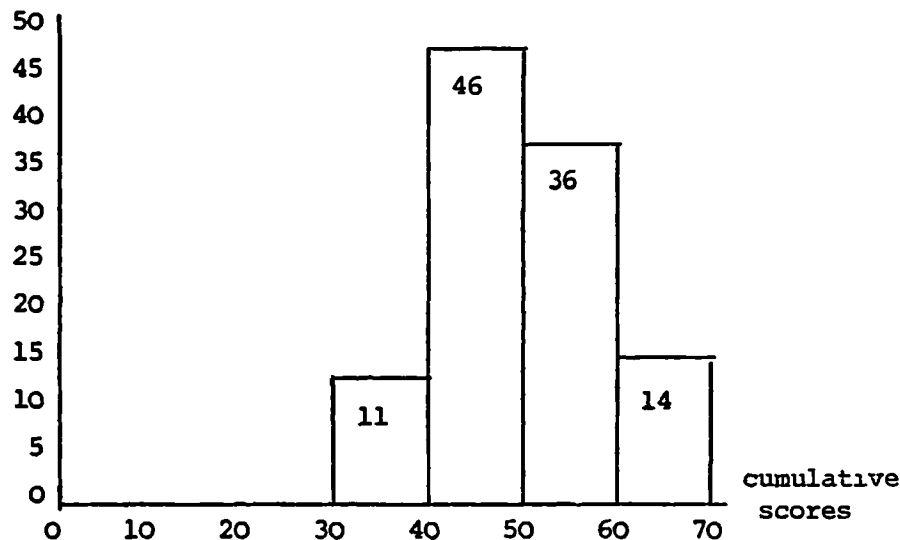
- Item 11 Time spent on paperwork;
- Item 4 The doctor's work; and
- Item 6 Sisters' job satisfaction.

A cumulative score was computed for each nurse and high scores were assumed to reflect positive attitudes towards the NP. Cross-tabulations revealed no significant associations between attitudes towards the NP and other variables, but nurses in senior grades tended to obtain higher scores.

Figure 8.26

Distribution of cumulative scores for nurses' attitudes towards the nursing process (blocked in multiples of 10)

number of nurses



n = 107

possible range 0 to 66

actual range 33 to 65

mean 49.52

standard deviation 8.33

8.8.4.1 Nurses' comments about the nursing process

At the end of the nurses' "attitudes towards the NP" scale, was written; "if you would like to make any general comments on the nursing process please use the space below". 32 nurses out of 107 (29.9% of the sample)

wrote comments which were categorised into neutral, favourable and critical.

Neutral comments

5 nurses (an SNO, a sister, a SN and two student nurses at H2) commented that any new system of care takes a long time to be accepted as people's attitudes change slowly. The SNO wrote "there is still much prejudice among nurses and doctors to be overcome". 3 nurses (an NO, a sister and a student nurse at H2) commented that it was too early to evaluate the effects of the NP.

Favourable comments

NP was said to aid nurses' learning (sister and student nurse, H1); make care more personal (student nurse, H2); increase nurses' awareness of patients' needs (two student nurses, H1 and H2); improve nurse-patient-family communication (sister and 2 student nurses at H1, sister and 2 student nurses at H2); and improve communications between hospital and community (pupil nurse at H2). A sister at H1 and 2 SNO's at H2 commented that time spent on paperwork was useful and that this would not be a problem in the long term.

Critical comments

A sister and a SN at H2 wrote that the basic concepts of NP process were too difficult for junior nurses to grasp. This was illustrated by a pupil nurse and an SEN who described NP as "just a new system of documentation". 2 SN's at H2 thought NP was good in theory, but very difficult in practice. A student nurse at H1 recognised that more education about NP was necessary.

An NO and SN at H2 and a pupil nurse at H1 complained about "the time spent on laborious paperwork", and a SN at H2 suggested that the documentation should be adapted to the individual needs of each ward. Others similarly complained about the inappropriateness of documentation to their clinical areas (SN and student nurse at H2). Perhaps related to this, several nurses argued that NP was better suited to the slower pace of medical and geriatric wards than fast-moving surgical and cardiac wards (two sisters and a student nurse at H2). A SN at H1 wrote that the number of questions asked was distressing to some patients.

Four nurses considered that there were often too few senior staff on duty to have patient allocation with individual accountability (sister, SN and pupil nurse, H1 and a student nurse, H2). One student nurse at H2 commented that "even using NP the views of patients and relatives are still ignored".

8.9 OFFICIAL POLICIES TOWARDS SOME NURSING ISSUES

This section of the questionnaire (see Appendix Part 2 Number 8) was completed only by nurses. 92 nurses (86% of the sample) completed the form satisfactorily. 15 nurses (14% of the sample) failed to complete the form for reasons shown below.

Table 8.55

Nurses who failed to complete the "official policies" form

| Reason | Number | Grade | Hospital |
|-------------------------------------------------------|--------|----------|----------|
| not completed due to "diversity of the unit" | 2 | NO | H2 |
| form left blank without explanation | 1 | NO | } H1 |
| | 4 | learners | |
| | 2 | sisters | } H2 |
| | 1 | learner | |
| "don't know" or "never informed" written across form | 1 | learner | } H1 |
| | 1 | sister | |
| | 1 | SN | } H2 |
| | 1 | SN | |
| "there appears to be no definite policy re questions" | 1 | NO | H2 |
| total | 15 | | |

The data were content analysed. As a check on inter-rater reliability, three science graduates independently selected key themes from the data, summarised their content and selected typical examples of comments for quotation. As far as possible, the analysis represents a consensus of the views of the researcher and the three collaborators.

To aid clarity, the results are presented in tables. It should be noted that all answers represented individual views or local policies. No official or formal policies were described by any of the respondents in either hospital.

8.9.1 "Issue One: the participation of patients in the planning of nursing care"

"a) What is your ward or unit policy towards the above issue ?"

Table 8.56

See overleaf (p. 271)

Table 8.56. Content analysis of nurses' responses to "official policies" form, Issue one, question a)

| summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------|----------|
| maximum participation encouraged | very positive | "full involvement of patient" | 4 | SNO sister | H2 |
| some participation encouraged | moderately positive | "encouraged to participate as much as they are able" | 8 | NO learner sister SEN | both |
| general support, but with limitations | slightly positive | "... but ward routine is important" "... but nurses' decision are usually final because of her experience" (sic). | 5 | NO learner SN | both |
| very limited participation acceptable | slightly positive | "the nurse advises, but cannot command" "their wishes are taken into consideration" | 8 | NO sister SN, SEN, learner | both |
| no policy, but intend to develop one soon | slightly positive | "nursing process will help us formulate policies" | 5 | Div.NO SNO, NO sister | both |
| no policy exists | neutral | "no policy exists" | 5 | NO sister | both |
| no knowledge whether policy exists or its content | neutral | "I don't know anything about this" | 16 | learner SN | both |
| policy varies on different wards | neutral | "all sisters have different views" | 4 | NO learners | H2 |
| depends on patients | neutral | "... intelligence and motivation of the patient" | 6 | NO, SN learner | both |
| patients not encouraged to participate, for various reasons | negative | "my ward is too busy" "doctors take no notice of patients' opinions anyway" "patients don't know what care they need" | 21 | NO sister SN, SEN learners | both |
| patient participation synonymous with information giving | misunderstood | "patients should be kept informed and reasons for care given" | 3 | SNO learners | H1 |
| question not answered, or answer irrelevant, illegible or unclassifiable | ← | N/A | 7 | SEN learners SN | both |
| | | total | 92 | | |

"b) What, if anything, are nurses in training taught about the above issues?"

Table 8.57. Content analysis of nurses' responses to "official policies" form, Issue one, question b)

| summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------|---------------|--------------------------------------------|----------|
| claimed to have been taught a lot and cited specific examples | very positive | "quite a lot" "there is a link between patient participation and NP." | 4 | learners SN | H2 |
| ward teaching encourages patient participation | positive | "I expect students to consult with patients when planning care" | 6 | sisters SEN, SN | both |
| in school learners taught to involve patients to some extent | positive | "depends on individual patient" | 7 | NO learners | both |
| taught to keep patients fully informed | slightly positive | "all care should be explained to patient" | 5 | SNO learners NO | both |
| topic is beginning to be taught | slightly positive | "hoping to develop this aspect" | 4 | NO sisters | H2 |
| expressed concern that very little is taught | neutral | "should discuss this more in school" | 6 | NO sister learners | both |
| no knowledge of what is taught | neutral | "don't know" | 9 | all qualified grades | both |
| nothing is taught | neutral | "subject was never mentioned in school or wards" | 23 | all grades - qualified & learners | both |
| subject is irrelevant as outside the role of nurses in training | negative | "trained staff plan care, learners only observe" | 4 | NO, SEN learners | both |
| taught to discourage patient participation | negative | "could be dangerous" | 4 | SN learner SEN | both |
| question not answered: or answer irrelevant, illegible or unclassifiable | ← | N/A | 20 | all grades | both |
| total | | | 92 | | |

8.9.2. "Issue two: the participation of relatives in the planning of nursing care"

"a) What is your ward or unit policy towards the above issue?"

Table 8.58. Content analysis of nurses' responses to "official policies" form, Issue two, question a)

| summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------|---------------|--------------------------------------|----------|
| maximum participation encouraged | very positive | "maximum encouragement given" | 1 | SNO | H2 |
| relatives encouraged to participate | positive | "this is positively promoted" | 9 | SNO sisters NO, SN learners | both |
| participation encouraged but not as formal policy | positive | _____ | 7 | NO sisters SN learners | both |
| encouraged to some extent depending on circumstances | slightly positive | "with elderly, long-stay and dependent patients" "if the patient is unable to communicate" | 13 | all grades - qualified & learners | both |
| no policy exists, but will be developed | neutral | "hoping to develop policy soon" | 2 | SNO NO | H1 |
| no policy exists/never informed | neutral | "I've never heard anything about this subject before" | 20 | all grades | both |
| answer implied misunderstanding of relative participation | negative | "relatives are questioned and asked for information if necessary" | 6 | SN, SEN learners | both |
| relatives kept informed only | negative | "informed of developments and care given" | 10 | all grades | both |
| discouraged initially, but encouraged later | negative and positive | "they are useful when planning discharge" | 2 | sister SEN | H2 |
| relative participation discouraged | very negative | "relatives should not interfere as this causes misunderstandings" | 15 | all grades SEN learners | both |
| question not answered; or answer irrelevant, illegible or unclassifiable | ← | N/A | 7 | | both |
| | | total | 92 | | |

"b) What, if anything, are nurses in training taught about the above issue ?"

Table 8.59. Content analysis of nurses' responses to "official policies" form, Issue two, question b)

| summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|----------------------|------------------------------------------------------------------|---------------|--------------------------------|----------|
| taught to encourage relative participation | very positive | "they must be invited to take part in planning" | 11 | all grades | both |
| relative participation taught to learners on the wards | very positive | "I certainly encourage this on my ward" | 8 | sisters SN, SEN learners | both |
| taught that participation desirable in certain circumstances | positive | "especially with the elderly" "for long-stay patients" | 7 | SN learners | both |
| taught to keep relatives informed | slightly positive | "and to tell them what's going on" | 9 | all grades | both |
| taught to obtain information from relatives | slightly positive | "relatives are a useful source of information about the patient" | 12 | all grades | both |
| taught to respect wishes of relatives | slightly positive | "must respect wishes of relatives" | 2 | NO sister | H1 |
| learners taught very little | neutral | "learners taught very little" | 8 | SN, SEN learner | both |
| nothing taught | neutral | "nothing whatsoever taught on this" | 19 | all grades | both |
| question not answered, or answer irrelevant, illegible or unclassifiable | ← | N/A | 16 | all grades | both |
| | | total | 92 | | |

8.9.3 "Issue three: the extent to which patients are encouraged to assist with their own care"

"a) What is your ward or unit policy towards the above issue ?"

Table 8.60. Content analysis of nurses' responses to "official policies" form, Issue three, question a)

| Summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------|----------|
| maximum self-care encouraged | very positive | "encouraged to be as independent as possible" | 44 | all grades | both |
| self-care encouraged/permitted in certain circumstances | positive | "allowed to do things for themselves if physically and mentally fit" "allowed if sensible" "as patient's condition improves" | 16 | all grades | both |
| self-care encouraged/permitted for specific tasks | positive | "we encourage urine testing, 24 hour urine collections and fluid charts if patients able and willing" "diabetic and stoma patients encouraged" | 4 | sisters SN SEN | both |
| very limited self-care allowed | slightly positive | "O.K. for small and simple tasks" "hygiene care only" | 3 | sisters learners SEN | both |
| self-care permitted for reasons irrelevant to this study | not classified | "to speed up turnover of beds" | 3 | SN SEN | H1 |
| patient self-care discouraged | negative | "nurse has the knowledge and knows best" | 4 | SEN learners | both |
| question not answered; or answer irrelevant, illegible or unclassifiable | ← | N/A | 18 | NO sister SEN learners | both |
| | | total | 92 | | |

"b) What, if anything, are nurses in training taught about the above issue?"

Table 8.61. Content analysis of nurses' responses to "official policies" form, Issue three, question b)

| summary content of theme | positive or negative | typical example | no. or nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------|----------|
| subject taught in detail | very positive | "subject taught in detail" | 2 | NO SN | H1 |
| patient self-care and independence taught | positive | "involve the patient whenever possible" "taught to encourage the patient to be independent" | 43 | all grades | both |
| too little is taught | positive | "trained staff need encouragement to teach learners" "learners should be taught the skills involved in teaching patients self-care, but are not" | 6 | NO sisters | both |
| nothing taught | neutral | "I've been taught nothing about the subject" | 10 | NO SN learners | both |
| no knowledge of what is or is not taught | neutral | "don't know what they do in the school" | 11 | all grades of qualified staff | both |
| this subject cannot be taught | negative | "patient self-care varies from patient to patient, so cannot be taught" | 5 | NO SN learners | both |
| question not answered, or answer irrelevant, illegible or unclassifiable | ← | N/A | 15 | all grades | both |
| | | | 92 | | |

8.9.4 "Issue four: The extent to which relatives are encouraged to assist with the nursing care of the patient"

"a) What is your ward or unit policy towards the above issue?"

Table 8.62. Content analysis of nurses' responses to "official policies" form, Issue four, question a)

| summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|--------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------|----------|
| maximum encouragement | very positive | "maximum encouragement and education" | 2 | SNO NO | H2 |
| relatives encouraged to assist with patient care | positive | "relatives are very welcome to participate as much as they are able" | 14 | all grades of qualified nurses | both |
| encouraged within limitations | positive | "allowed to help within safe limits" "as much as is safe" | 6 | sisters SEN learners | both |
| depends on the relatives and patients concerned | positive | "patients' wishes must be respected" "according to patient's condition" "depends on relatives' capabilities" | 7 | NO SN sisters | both |
| relative training and supervision needed | positive | "adequate training and supervision of relatives essential" | 6 | SN learners | H2 |
| encouraged in specific circumstances | slightly positive | "in chronic conditions for training purposes" "to facilitate continuity of care after discharge" | 4 | sisters SN SEN | both |
| no knowledge of policy | neutral | "don't know" | 17 | all grades | both |
| relative participation allowed in very limited circumstances only | slightly negative | "limited to very simple tasks" "wait for relatives to specifically ask" "only if short of staff" | 12 | all grades | both |
| relative participation discouraged | negative | "relatives are allowed to do nothing" | 6 | SEN learners | both |
| question not answered; or answer irrelevant, illegible or unclassifiable | ← | N/A | 19 | all grades | both |
| total | | | 92 | | |

"b) What, if anything, are nurses in training taught about the above issue?"

Table 8.63. Content analysis of nurses' responses to "official policies" form, Issue four, question b)

| summary content of theme | positive or negative | typical example | no. of nurses | grade of nurses | hospital |
|------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------|---------------|-----------------------------|----------|
| taught to encourage relative participation | very positive | "they learn the benefits of relative involvement" | 14 | all grades - mainly seniors | both |
| relative participation taught in ward teaching | very positive | "nurses taught to educate relatives to care for patients" | 2 | sister SN | H2 |
| relative participation allowed in some circumstances | positive | "allowed to do simple tasks if medically safe" | 10 | all grades - mainly juniors | both |
| taught only to keep relatives fully informed | slightly positive | _____ | 4 | SNO learners | both |
| taught that relatives should encourage patients | slightly positive | "relatives encourage patient independence" "relatives should encourage treatment compliance" | 6 | sister SN, SEN learners | both |
| concerned at lack of teaching | slightly positive | _____ | 4 | sisters learners | H2 |
| no knowledge of what taught | neutral | "don't know" | 21 | all grades | both |
| nothing taught | neutral | "I've never heard of this before" | 20 | all grades | both |
| nothing could be taught | slightly negative | "as depends on condition of patient" "all depends on type of ward" | 4 | NO, SN learner | both |
| taught to discourage relative participation | negative | "relatives should not interfere" "relatives not allowed to do nursing work" | 6 | SN SEN learners | H1 |
| question not answered | ← | N/A | 1 | | H1 |
| total | | | 92 | | |

PART 2. CHAPTER 9.

DISCUSSION

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This chapter discusses the findings and methods of the questionnaire survey. Discussion is continued in Part 4 Chapter 14 in the light of material on development of the NP measuring scale. Chapter 14 integrates the two parts of the study and considers the overall findings in relation to the theoretical framework and hypotheses. It also includes discussion of the theoretical and practical implications of the study as a whole.

9.1 FINDINGS

9.1.1 Sample characteristics

In this section relationships between questionnaire scores and various individual attributes and characteristics are considered.

9.1.1.1 Nurses' grade, age, qualifications and hospital

For nurses, high scores on most scales were significantly associated with senior grade, older age group and more professional qualifications. This is consistent with American work on nurses' attitudes towards the issue of patients' rights (Pankratz and Pankratz, 1974).

Nurses in more senior grades obtained consistently higher scores. They reported more positive attitudes towards patient and family participation; were more likely to claim to organise care to facilitate patient and family participation; had greater familiarity with NP and had more positive attitudes towards NP.

It is possible that senior nurses were influenced by the "demand characteristics" of the research (i.e. the tendency for researchers' expectations to influence subjects' responses, described by Orne (1962)), and keen to present themselves as liberal and up-to-date. Equally, senior nurses may have been more familiar with the considerable amount of nursing literature which recommends increased patient and family participation, and thus able to produce answers in accord with current thinking. However, neither of these explanations seem likely to have produced such a strong and consistent effect.

A more likely explanation is that nurses removed from the stresses of direct and constant patient contact may become more idealistic. The Report of the Committee on Nursing (HMSO, 1972) noted the stressful nature of much nursing work. Perhaps authoritarian attitudes and controlling behaviour serve as stress-reducing defence mechanisms, as postulated by Menzies (1960), which become less necessary with increased seniority.

The possession of more professional qualifications was also associated with positive attitudes and with high scores for care organised to promote participation. Qualifications and seniority were correlated, but more

education is in itself likely to be a liberalising force as shown in the work of Pankratz and Pankratz (1974) and Gilbert and Levinson (1957).

Older age group was also associated with care organised to encourage patient and family participation and with greater familiarity with NP. Age and seniority were certainly correlated, with older nurses in more senior posts. It is possible that increasing age could bring with it increased confidence in professional competence and thus willingness to allow patients and their families to take some control.

Nurses at H2 obtained higher scores on two of the four attitude subscales, that is they had more positive attitudes towards patient and family participation in planning, but not implementation of care. The reasons for this are unclear, but could be associated with some of the identified differences between nurses in the two hospitals. Nurses at H2 were more likely to describe themselves as British and had more educational qualifications. H2 had further developed its use of NP and had more in-service educational programmes for nurses. These differences may account for the variations in attitudes.

9.1.1.2 Patients' and relatives' previous experience of hospitals

Patients and relatives had considerable previous experience as hospital patients. Two-thirds of patients and half the relatives had at least two or three previous admissions. However, less than a fifth of them had worked in hospitals.

Previous hospital experience, either as patient or employee, promoted an active role. Both patients and relatives who obtained high scores on one or more of the attitude subscales were more likely to have worked in hospitals, as were relatives who expressed a desire for increased involvement in care. Similarly relatives who themselves had several previous admissions were more likely to report high levels of participation in care during the patient's current admission.

The mechanism by which previous hospital admissions and employment promote patient and family participation is presumably enhanced familiarity with the hospital environment. This increases knowledge, and realistic expectations about what will happen, itself a form of cognitive control (predictability) (see Averill, 1973). Anxiety is also presumably reduced by increased familiarity with the hospital environment (Wilson-Barnett and Carrigy, 1978).

9.1.1.3 Patients' and relatives' education and knowledge of the illness

About a quarter of patients and relatives were scored as having full and accurate knowledge about the patient's diagnosis, tests and treatment.

An eighth of patients and relatives had no knowledge or incorrect knowledge. For both patients and relatives high knowledge scores were associated with more previous hospital admissions and more educational qualifications. Patients with high scores for knowledge were of higher social class, and relatives with greater knowledge had more professional qualifications. Two-thirds of patients and relatives had no educational, professional or technical qualifications. Younger relatives tended to be better qualified than older relatives.

Patients and relatives with high scores for knowledge of diagnosis, tests and treatment tended to report high levels of participation during this admission. Patients with more educational qualifications tended to report that they and their relatives had carried out many of the listed care procedures. Similarly, patients with more professional qualifications tended to have most positive attitudes towards patient and family participation in care.

As shown in the work of Roter (1977, 1979), adequate information about the illness and its management is essential to provide a basis for informed participation in decision-making and delivery of care. Ignorance may have forced many patients and relatives into passive, subservient roles. The relationship between information and participation is unclear. Patients and relatives with particular personality characteristics or coping styles, such as vigilance (see De Long, 1971), may have sought both information and participation to enhance cognitive, behavioural and decisional control (Padilla, 1981).

Equally, the possession of relevant information may have motivated them to participate or may have made participation easier. Nevertheless the importance of information for both patients and relatives has been well documented (see Kendall and Watson, 1981; Doerr and Jones, 1979) and has clear implications for participation in care.

The possession of educational and professional/technical qualifications was also significant in promoting involvement in care. Several explanations are possible. A strong general education makes easier the acquisition and understanding of more specific information about the illness and its treatment, which as previously discussed, forms the basis for informed participation. General education bridges the social and intellectual gap between nurses and patients. An educational and social gap between doctors and patients is widely acknowledged (Blane, 1982), but this study also found that nurses mostly had more educational, professional and technical qualifications than patients and relatives. Such inequality may have promoted patient subservience and nurse dominance.

Finally, the possession of a strong general education is likely to enable patients and relatives to articulate questions and express opinions more confidently and competently.

9.1.1.4 Patients' and relatives' social class and employment

Patients and relatives reported similar patterns of employment and social class, although a substantial minority of patients (16%) and relatives (18%) did not answer these questions. Higher social class was associated with more educational and professional qualifications for both patients and relatives.

Middle class relatives reported more positive attitudes towards relative participation in planning care than working class relatives. As previously indicated, middle class relatives are more likely to have the confidence and social competence to express their opinion to predominantly middle class nurses. (The majority of the nurses, particularly in H2, were from middle class backgrounds). Higher social class is known to be associated with internal locus of control (Phares, 1976) and with high expectations of self-efficacy (Ryckman et al, 1982), both of which are relevant variables.

9.1.1.5 Patients' and relatives' age, relationship and anxiety

Patients who wanted more involvement in care tended to be older, whereas relatives who reported high levels of involvement in listed care activities tended to be younger. Age-related variations in illness behaviour have often been observed (e.g. Maclean, 1974) but why patients and relatives should vary is difficult to explain. There was no relationship between age and anxiety in this study, but previous work has suggested that younger patients may experience more anxiety on admission (Wilson-Barnett, 1977). Increased involvement could be seen as a coping strategy used by the less anxious older patients. It is possible that younger relatives performed more activities because of greater energy and fitness. There was a great deal of pathology among the relatives as evidenced by previous hospital admissions and older relatives were probably less healthy than younger ones.

Half the relatives were a patient's spouse; the next most common relationships were son/daughter and friend. Married relatives were more likely to express very positive attitudes towards patient participation in planning care and relative participation in direct care giving. A possible explanation for this is the intimacy of marriage, which permits much closer involvement of the spouse in decision-making and care giving. Close involvement in a relative's care may be less socially acceptable or emotionally desirable in other relationships between adults, such as son/daughter, siblings and friends.

Patients reported themselves as much less worried about this admission than relatives. Only a third of patients were moderately or very worried, whereas two-thirds of relatives were moderately or very worried. The validity of this simple four-point self-rating scale is doubtful. The most anxious patients may have utilised denial as a coping strategy (see discussion by Cohen and Lazarus, 1979) and would therefore produce inaccurately low scores. Relatives may have felt that to report being anything other than very worried would appear callous. The correlation between self-reports of anxiety and objective physiological indices is low anyway (Lader, 1975).

Patients who reported high levels of worry about their admission also expressed very positive attitudes towards relative participation in care planning. Maybe relative involvement increases such patients' sense of security and reduces their anxiety. It is possible that anxious patients seek information and control and are vigilant which may partly explain this finding.

9.1.2 Subjects' comments

Comments written about the main attitude scale, the organisation/ involvement in care scales and the care activities in hospital scales are discussed together, because similar themes arose in each section. As illustrated in Table 9.1 more nurses wrote comments on every section and a very small proportion of patients and relatives wrote anything, although slightly more patients than relatives did so.

9.1.2.1 Nurses' comments

Senior nurses wrote proportionately more comments than juniors and tended to be more supportive of patient and family participation in care. This difference between juniors and seniors also occurred on most of the scale scores and is discussed in Section 9.1.1.1.

Nurses' comments revealed a range of disparate views and it may be an over-simplification to describe general themes revealed. Nevertheless, there were some attitudes and values so commonly expressed as to suggest that the majority of comments included these themes.

Nurses clearly saw themselves as having control over patients, which reflects the traditional patient-health professional relationship described by Parsons (1964). This attitude of "benevolent paternalism" (see Bassford, 1982) was illustrated by comments about patients' and relatives' inability to "contribute sensibly" to decision-making, the problem of "ignorant" relatives who "interfere"; and their views that patients feel "neglected" if not "pampered a little" by nurses. Notions of nurses having authority over patients appeared in comments about the possibility

of "delegating tasks", but "retaining ultimate responsibility". The nurse could choose to "allow" a patient to participate, but this would be the nurse's decision.

Another theme to emerge from nurses' comments was the lack of clear boundary to nurses' responsibility for patients. Nurses had very hazy ideas, yet were concerned about issues of legal liability, as well as moral responsibility if anything went wrong as a result of patient or relative participation. Comments suggested that nurses were strongly motivated to avoid blame and criticism. Several hinted that much nursing practice was designed to avoid negative outcomes, rather than promote positive outcomes, either for themselves or their patients.

The final theme that emerged strongly was nurses' lack of awareness of potential psycho-social benefits to patients and relatives of increased participation in care. Other than the constraints mentioned above, it seemed that patient and family participation was judged against managerial considerations such as its effect on ward routine and nurses' workload. This is another illustration of nurses' lack of awareness of patients' and relatives' psychological needs which has been frequently described (e.g. Silva, 1977).

9.1.2.2 Patients' and relatives' comments

With very few exceptions, patients' and relatives' comments implied an uncritical acceptance of a traditionally passive, compliant role, as described by Rosenthal et al (1980). These views contradicted attitudes and opinions expressed in the questionnaire scales. This apparent contradiction may result from the view that it is acceptable to indicate desire for a more active role by endorsing particular questionnaire items, whereas it is potentially risky to write anything critical of the existing regime while still under the hospital's control. Despite French's (1981) assertions to the contrary, patients and relatives might have felt less constrained had the questionnaires been administered after discharge.

Several patients and relatives implied by their comments that passivity was the expected behaviour and that active participation required "permission" from staff. Several commented that they would welcome increased participation but had never been "invited to share in decision making" or "given permission to carry out care procedures". Thus, patients and relatives felt inhibited to initiate activity or involvement without some prior message of approval from staff. This further indicates how powerful nurses are in determining rewards and punishments for patients and relatives as discussed by Anderson (1973); Tagliacozzo and Mauksch (1972); and Taylor (1979).

Like the nurses, the patients' and relatives' comments showed that they judged the value of participation on largely pragmatic grounds. It was discussed in terms of its organisational and economic effects rather than psychological or social effects. Comments also indicated that respondents were concerned about effects of participation on the ward as a whole rather than on themselves solely. This could result from a desire to appear unselfish to the researcher.

9.1.3 Data from the "attitudes towards patient and family participation in care" scale.

This 24 item Likert-type attitude scale was administered to all subjects and revealed a broad spread of attitudes. It was an ordinal level scale and thus permitted rank ordering of subjects, so that the position of an individual or a subject group could be judged in relation to the data set as a whole. However, it was impossible to attach absolute meaning to scores, which is a major limitation of Likert scales.

In summary, nurses had most positive attitudes, relatives next most positive attitudes and patients least positive (or most negative) attitudes towards patient and family participation in care. This will be discussed in more detail later, but first the reasons for differences among the three subject groups need to be considered.

Firstly, it is possible to speculate that being a nurse, patient or relative was less important than the individual's social class, education and qualifications, all of which were shown in this study to be powerful predictors of attitudes towards patient and family participation in care. Nurses generally had the most educational and professional qualifications and the highest social class background. The association between high scores and nurses' seniority and qualifications has already been discussed and is consistent with this view. Furthermore, respondents with the poorest social background and educational attainment (mainly patients and relatives) tended to use response biases of acquiescence and neutral responding as discussed in Section 9.2.1 and 9.2.2. These would tend to reduce overall scores, given that most scores were in the top half of the theoretical distribution.

A second explanation is that nurses could be expected to hold most liberal and humanitarian views because of their familiarity with the issues, derived from their nursing education, which includes some study of philosophy, ethics, sociology and psychology (GNC, 1977) and their professional reading. Recent statements about the underlying philosophical values of particular schools of nursing (e.g. Champion, 1984) specify the importance of holistic care, the value placed on patients' rights to

self-determination and similar concepts. In contrast, patients and relatives are unlikely to have considered these questions until they have experience of hospitals. Because of lack of familiarity with relevant philosophical, psychological and sociological concepts, which are not usually taught in British schools, they are likely to accept the passive role imposed upon them by the hospital (Taylor, 1979) and are likely to judge the value of patient and family participation by pragmatic criteria, such as efficiency, nurses' work load, etc.

This second explanation accounts for differences between nurses and the other two subject groups, but does not explain the difference in attitudes between patients and relatives. Explanations for the relinquishment of control implicit in Miller's (1979, 1980) theory of control may illuminate the question. Patients are much more directly affected by the illness and treatment than are relatives. Patients are thus likely to perceive nursing interventions as stressful and threatening and will therefore judge the exercise of control as more difficult and emotionally arousing (Solomon et al, 1980). According to Miller's theory, patients are therefore more likely than relatives to choose to relinquish control and accept passivity.

Nurses obtained the highest scores on the whole scale, the four sub-scales and 20 of the 24 individual items. They had the lowest mean scores on Item 6.

Item 6. "If patients are well enough, they should be allowed to keep their own medicines in their lockers and take them as prescribed"

80% of nurses disagreed or strongly disagreed with this item and only 12% agreed or strongly agreed. This item was more negatively scored than any of the others by the nurses.

Despite studies which demonstrate the efficacy of self-medication (e.g. Carnahan, 1973; Franclemont and Sclafani, 1978), nurses were unwilling to allow patients to take responsibility for drug compliance, even when medically safe. This paternalistic attitude fails to acknowledge patients' "consummate ability" (Tiffany, 1979) for self-care and fails to prepare them for return to the community.

Additional data on nurses' attitudes produced even higher scores than the main study sample of nurses. Senior nurses had more positive attitudes than juniors as in the main study sample. Mental handicap and research nurses obtained (non-significantly) highest scores, and lowest scores were obtained (non-significantly) by psychiatric nurses. In the main study all nurses were from medical and surgical wards so the generality of the finding is uncertain.

Relatives obtained the next highest overall scores; which, like nurses' scores, were all in the top half of the distribution, although avoiding ceiling effects.

Relatives obtained the highest mean scores of all subject groups on Items 2, 3, 6 and 11 which were:

Item 2. "When a patient is first admitted, the nurse should ask him which of his problems and needs he regards as most important"

Item 3. "Relatives have a right to know what is being done to their 'nearest and dearest' by the nursing staff"

Item 6. "If patients are well enough they should be allowed to keep their own medicines in their lockers and take them as prescribed"

Item 11. "Before an operation the implications and risks of surgery should be discussed with the patient's nearest relative"

Relatives expressed a desire for more pre-operative information and discussion. They also wanted more general information about the patient's care. These concerns have been identified in previous research (e.g. Bond, 1982). Although relatives obtained slightly lower scores than the other two groups on Item 6, it was still rated very negatively. 72% disagreed or strongly disagreed with the item and only 22% agreed or strongly agreed.

Patients had the least positive attitudes overall and on all four subscales. They had the lowest scores on 23 of the 24 items: the only item on which patients did not have the lowest score was Number 6.

The rank order of mean scores for individual items was significantly correlated across the three subject groups. Items which obtained highest scores from all groups (including the nurses' subsidiary data) were Items 3, 8, 9, 11, 12 and 20. These had average scores for each subject group in excess of 4.0. This shows that each item had mean ratings between "agree" and "strongly agree" from all subject groups. The items were:

Item 3. "Relatives have a right to know what is being done to their 'nearest and dearest' by the nursing staff"

This was the most highly ranked item for relatives, but only ranked as tenth most important by nurses, which shows a discrepancy in what nurses and relatives regard as important.

Item 8. "Nurses should encourage patients to be as independent as possible"

Nurses and patients ranked this as slightly more important than relatives. Patients rated this as joint second most important item, which indicates the weight they attach to the maintenance of independence.

Item 9. "Even if it would be quicker for a nurse to dress an elderly lady she should try to encourage the old lady to do it herself"

This item obtained the highest mean score from nurses, presumably because it is concrete, specific and unambiguous, and concerns a topic frequently discussed in nursing. Patients and relatives gave this seventh and eighth highest ratings respectively.

Item 12. "Patients are entitled to do things for themselves as long as they feel well enough and provided it is medically safe"

Patients rated this as the most important item. It was given third and fourth ranks by relatives and nurses respectively.

Item 20. "When a child is in hospital his mother should be encouraged to wash and feed him provided it is medically safe"

Nurses ranked this item as the second highest. It was surprising that patients and relatives rated this very highly as it was outside their current hospital experience.

Items which were given the lowest scores by all subject groups were Numbers 1, 6, 14, 16 and 24. Four of the five were reverse scored as disagreement was assumed to indicate a positive attitude towards patient and family participation. Consequently the results for Items 1, 14, 16 and 24 could be distorted by the acquiescence tendency of some subjects.

Item 1. "The essence of nursing is doing things for people to enable them to rest and relax in hospital"

Patients and relatives obtained lowest scores on this item, mostly having agreed with it. Such a high level of agreement was inconsistent with responses to other items and suggests either misunderstanding or a strong acquiescence tendency. Inter-item correlations showed that for nurses this had the lowest correlations of all items and thus it may have been measuring something different from the rest of the scale.

Item 6 has already been discussed in this section.

Item 14. "It is always the nurse's responsibility to decide on the most suitable time to renew a patient's bandage"

Item 16. "If a patient has a skin disease the nurse should apply the ointment to ensure that it is rubbed in properly"

Items 14 and 16 were reverse scored, so that disagreement was assumed to indicate a positive attitude. However, clearly many subjects in all groups agreed with these statements.

Item 24. "Most patients are happy to hand over to the nurses complete responsibility for deciding what care they need"

This was also reverse scored, but many subjects, particularly nurses, agreed with it. Rather more patients disagreed or strongly disagreed.

9.1.4 Data from the organisation/involvement in care scales

Nurses' overall scores were all in the top half of the possible distribution, indicating that nurses generally claimed to organise care to facilitate patient and family participation in care. Problems concerning the validity of these data are discussed in Section 9.2.2.4.

Nurses had higher scores than patients and relatives on comparable questions. Thus patients and relatives did not agree with nurses about the extent to which patient and family participation was permitted. A discrepancy between nurses' and other subjects' perceptions of participation was also found in the data from the "care activities in hospital" scale, discussed in Section 9.1.5.

Overall, patients and relatives obtained higher scores on questions concerning ideal involvement than questions concerning actual levels of involvement in care. Similarly, on each of the four paired questions, patients and relatives had higher scores for ideal than for actual involvement. This consistent difference indicates that patients and relatives wanted more involvement in care than they actually had. Reasons for this apparent inability of patients and relatives to participate more fully may be associated with their desire or need to conform to the staff's expectations of "good" behaviour, which includes passivity and compliance (Armitage, 1980; Skipper, 1965).

Social psychological research has repeatedly demonstrated the powerful urge to conform to the prevailing group ethos, which few can resist (e.g. Sherif, 1935; Asch, 1956) and the willingness to obey authority figures, however unreasonable their demands (Milgram, 1974).

It was interesting that high scores on the actual and ideal involvement subscales were significantly correlated for both patients and relatives. Those who most wanted more participation were those who already had the greatest current participation. Thus, those who had a sense of control over their care valued it, and wanted to increase rather than decrease it. Presumably their self-efficacy or mastery expectations were raised by success (Bandura et al, 1975).

Patients reported higher levels of current participation than relatives, which accords with data on participation in practical care tasks (see Section 9.1.5.2). In view of the much greater attention given to patient rather than relative participation in the literature, it is unsurprising that patient self-care should be better developed in hospitals than relative participation. On the other hand, relatives expressed a greater desire for increased involvement than patients, which may reflect their frustration at being excluded from care giving (Castledine, 1978).

9.1.5 Data from the "care activities in hospital" scale

9.1.5.1 Data from nurses

For each of the 20 care activities, there were more nurses who claimed that the activity could be performed by a relative, than either patients or relatives reported that it was actually carried out by a relative. Similarly, on 15 of the 20 care activities more nurses claimed that the activities could be carried out by patients than patients or relatives reported that they actually were done by patients. If patients and relatives are correct, then nurses' apparently high levels of support for patient self-care and relative care were not translated into practice. This mismatch between nurses' descriptions of practice and actual practice has been described previously (e.g. Bendall, 1975). The questionnaire data generally indicate that whilst not actually opposed to patient and family participation, nurses do not regard it as important or central to their work. They are thus unlikely to make particular efforts to facilitate or encourage participation.

Care activities which more nurses claimed relatives rather than patients could participate in included helping the patient to eat and drink, to bathe, and to walk to the toilet; brushing the patient's hair; rubbing the patient's back or bottom; tidying the bedclothes or pillows; washing the patient in bed; and making him or her comfortable in the bed or chair. It is noticeable that these are all basic care activities and none of the more technical activities are included. Nurses considered that technical care should be carried out by patients themselves, in preference to relatives. These included filling in fluid charts, applying ointment to skin, testing urine and giving injections or suppositories.

Items which the greatest number of nurses thought patients could participate in were: dressing and undressing (97% of nurses); cleaning teeth and mouth (92% of nurses); applying ointment to skin (86% of nurses) and filling in fluid charts (84% of nurses). Items which the smallest percentage of nurses thought patients should participate in were: taking the pulse (7%); taking the temperature (10%); rubbing the back or bottom (11%); assisting with bathing (17%); and putting in ear or eye drops (21% of nurses).

It is interesting that so many nurses considered that applying ointment and filling in fluid charts were suitable tasks for patient self-care. There was no obvious reason why so few nurses accepted patient participation in temperature and pulse-taking and inserting ear and eye drops. Presumably nurses feared that observations might be inaccurate and drug compliance might be low. Ear and eye drops are commonly prescribed by GP's for self-administration at home (Howie, 1979),

yet only a fifth of these hospital nurses regarded this task as suitable for in-patients. It is unlikely that patients who required ear and eye-drops after discharge were adequately prepared for this before going home. Similarly many people are required to monitor temperature and/or pulse at home for medical as well as for contraceptive reasons. There is ample evidence that appropriately trained lay people can successfully carry out much more complex procedures such as BP monitoring (Wilkinson and Raftery, 1978); recording of peak expiratory-flow rates (Hetzl et al, 1979); and home haemodialysis (Reliszko and Barré, 1978).

Items which the largest proportion of nurses thought relatives could participate in were: helping the patient to eat and drink (95% of nurses); brushing the patient's hair (91% of nurses); tidying the bedclothes or pillows (87% of nurses) and dressing and undressing the patient (80%). Items which the smallest percentage of nurses considered relatives should participate in were: taking the pulse (8%); taking the temperature (12%); giving a suppository (13%); and giving an injection (20%).

Most nurses were willing for relatives to help with some basic tasks. However, the participation of relatives in more technical tasks seemed to be largely rejected. Nurses' expertise is certainly essential during acute illness, but relative participation may be valuable for long-stay patients and the chronically ill. Although the study was carried out in acute wards, many patients had recurrent admissions, and a few had been in hospital for many months. Teaching relatives to check observations, give injections, etc. and giving them supervised practice is an essential part of preparation for discharge, if such care must be continued at home. There are insufficient community nursing resources to match demand (Hockey, 1968; Jones, 1967) and much home nursing is carried out by relatives (Hemsi, 1982). These data indicate that hospital nurses may be unaware of the necessity for relatives to be trained to give such care after discharge.

9.1.5.2 Data from patients and relatives

Patients reported far more self-care than relative care, although an eighth of patients indicated that they had not carried out any of the care procedures. However this finding must be interpreted in the light of the methodological problem discussed in Section 9.2.2.5. The lack of ticks on the forms could be attributed to error rather than any intention to indicate meaning.

Ten per cent or fewer of the patients reported that they had tested their own urine; given themselves an injection or suppository; put in ear or eye

drops; tested their temperature or pulse; rubbed their back or bottom; or filled in their fluid chart. As described earlier, 86% of nurses wrote that patients could complete their own fluid charts, yet only 10% of patients reported that they did so. There were similar substantial differences between nurses and patients for items on applying ointment to the patients' skin (patients 13%, nurses 86%) and testing the urine (patients 5%, nurses 49%).

Reasons for nurses' failure to put into practice their knowledge and ideas are complex, but may include resistance within nursing to change (Scott-Wright, 1969); presumably associated with the traditional apprenticeship model of training, which emphasises skill rather than understanding (Clark, 1978); and the hierarchical management structure which takes away autonomy and responsibility from the individual. In this climate innovators are likely to be seen as deviants (Ruano, 1971) and rejected. In addition nurses may have derived information from their teachers and books; but these are seen as part of an idealised world of theory, which has little relationship to, or impact on, everyday work (Miller, 1985).

Activities which patients claimed their relatives did most commonly were tidying the bed and making the patient comfortable. According to the patients, no relative had filled in fluid charts, given a suppository, or inserted ear or eye-drops. Overall, patients perceived that their relatives had carried out very little care: two-thirds of the patients claimed their relatives had carried out none of the care procedures. Relatives also wrote that they contributed very little to care and half reported that they gave no care. A third claimed to have tidied the bed or made the patient comfortable. No relatives had filled in a fluid chart, taken the patient's temperature or pulse, given an injection or suppository, or tested the patient's urine.

It was apparent from observations in the wards that visits tended to be fairly short and several relatives visited together. Some relatives told the researcher that it was convenient for several members of the family to come in one car, rather than travel at separate times. Brevity of visits and the presence of more than one visitor would inhibit relative participation. Although both hospitals had open visiting, most came in the evenings, often at the time of nurses' supper breaks. Observations indicated that nurse-relative contact was minimal, other than social chat mainly with junior nurses. Only if a relative sought out a senior nurse for specific information was there sustained discussion about a patient's care. This supports Bond's (1982) findings in cancer wards.

A third of relatives thought that patients had performed no self-care. As relatives were not in the wards all the time, it is unlikely that they could provide this information accurately. No relatives thought that patients had ever taken their own pulse, given themselves a suppository, or inserted ear or eye-drops.

9.1.6 Nursing process data

9.1.6.1 Use of nursing process in the 16 wards

No significant differences emerged between the two hospitals in the scores for use of NP. NP scores were distributed across only 57% of the possible distribution. None of the wards obtained scores in the bottom 14% of the possible distribution, presumably because both hospitals were attempting to introduce care planning, and some NP ideas and documentation must have influenced even the non-NP wards. No wards scored in the top 29% of the distribution, which indicates that none were using NP fully. This problem of finding well-matched NP and non-NP wards in the same hospital had been anticipated and was largely unavoidable.

In this study NP was found to have negligible effect on practices and attitudes in relation to patient and family participation, despite the frequently expressed view that they are inextricably linked (Hargreaves, 1979; Long, 1981; Ashworth, 1982). A small number of non-significant effects were found, but these lacked consistency and are of doubtful psychological significance. The absence of a relationship between NP and patient and family participation may result from the very limited and incomplete use of NP in these wards, rather than provide valid information about the effects of NP. However, if a relationship had been demonstrated it would be impossible to interpret. NP wards may differ from non-NP wards in various ways, which were not controlled in this study, such as staff competencies, as discussed by Shukla (1981). Such factors are just as likely to account for differences as organisational structures like NP. ✓

Examination of wards' scores on individual item revealed a highly consistent pattern. Highest scores were obtained for general points and patient assessment, suggesting that these aspects developed first and/or were easiest to implement and sustain. As nursing assessment forms the basis for the rest of NP (Mayers, 1978) it is logical that it should be developed first and obtain the highest scores; but this supports Luker's (1981) assertion that nursing literature devotes a disproportionate amount of space to patient assessment. The next highest scores were obtained for problem identification, care planning and planned nursing actions. Lowest scores were obtained for goal setting and evaluation,

suggesting that they tend to be introduced last and/or that they were most difficult to put into practice. This confirms Luker's (1981) view that evaluation is a much neglected area of nursing. The lack of current knowledge about the effects of specific nursing interventions (Openshaw, 1984) makes difficult the formulation of realistic goals and may account for nurses' reluctance to specify objectives. Gooch (1982), a ward sister, also reported that evaluation and goal identification were major difficulties when introducing NP. ✓

9.1.6.2 Nurses' familiarity with and attitudes towards nursing process

More than half the ward based nurses had worked for less than two months, if at all, on wards using NP. About a third of nurse managers claimed less than two months direct involvement with NP, although another third claimed more than six months direct involvement in their units. This lack of familiarity is important to consider in relation to nurses' attitudes, which will be considered later in this section.

Most nurses had read little about NP. More than a quarter claimed to have read nothing and only one eighth claimed to have read three or more books or articles. This may be associated with the finding that nearly half the nurses claimed that they were not encouraged to read about NP. This supports previous research which has shown that British nurses read very little professional literature (Myco, 1980) and are not encouraged to do so by their seniors (Barnett, 1981).

Attendance at teaching sessions was patchy with a quarter of nurses claiming no teaching and another quarter claiming to have attended several teaching sessions. It was noticeable that those who had read widely had also attended several teaching sessions. Clearly teaching was not reaching everyone and as Gournay (1986) observed post-basic education may preach to the already converted.

Despite their limited experience of NP, nurses had generally positive attitudes towards NP with scores in the top half of the theoretically possible distribution. As found by Bowman et al (1983), nurses in senior grades expressed most positive attitudes, although these differences did not achieve statistical significance.

Overall, NP was rated as having most beneficial effects on nurses' learning opportunities, the nurse-patient relationship and overall standards of care. This fits in with similar claims in anecdotal accounts of the effects of NP (Gooch, 1982; Law, 1981). NP was most frequently rated as having no effect on relatives' contentment and well being and on doctors' work. The lack of effect on doctors' work is interesting in the

light of critical comment in the medical press (Mitchell, 1984), which assumes that NP would have detrimental effects for doctors. The effects on sisters' job satisfaction was most commonly rated "don't know", presumably because subjects thought that only sisters and CN's could answer that. NP was rated as having a "bad" effect on only one item, paperwork. Whether this view arose from actual experience or was picked up as part of the frequently expressed "mythology" surrounding NP is not clear. Law (1981) considered that the introduction of NP resulted in improved written records, but it may take time for nurses to adjust and stop using the old recording systems (Barnett, 1982). Some duplication of records initially seems likely.

9.1.6.3 Nurses' comments about nursing process

30% of nurses added comments to the attitude scale, which, at the end of a long questionnaire, indicated considerable interest in NP among these subjects.

Positive comments referred to effects of NP already identified in the literature. For example, nurses commented that NP improved communication between hospital and community services; nurses' learning opportunities (Little and Carnevali, 1976; Law, 1981); nurses' awareness of patients' needs (Marram et al, 1976); nurse-patient-relative communication (Law, 1981); and that it made care more personal (Altschul, 1982).

Negative comments appeared to be criticisms of the way NP was used in these hospitals, rather than criticisms of NP in principle. Most areas of concern have also been identified in the literature. Some considered NP was too complicated which points to the need for more educational preparation as claimed by several respondents and discussed by Crow (1977). Misconceptions about NP were illustrated by descriptions of it as "just a new system of documentation". Norton (1981) also found this view was common. Nurses complained about laborious paperwork which had not been adapted to local needs, which may have been a justifiable criticism. Several were concerned about the feasibility of NP in busy wards, ✓ implying that more staff were required to organise care this way. Matthews (1975) also found that during staff shortages wards using patient allocation tended to revert to task allocation. Others complained about ✓ potential distress to patients of long, inappropriate assessment interviews; a problem also identified by Norton (1981). Some cynically suggested that the views of patients and relatives could still be ignored, even using NP; a view shared by Palasın (1971) on the basis of observation of NP wards.

9.1.7 Official nursing policies towards patient and family participation.

These open-ended questions were given to nurses only. Despite lengthy comments from 92 nurses no formal or informal policies towards these issues were described, which indicates that none existed. There was little consensus on three of the four questions and great variations in attitudes and current ward practices were apparent. Practice in relation to patient and relative participation seemed to vary according to the individual's opinions. Even within one ward or unit there were a wide variety of practices described. It appeared that neither sisters, NO's, nor SNO's exerted much influence over their nurses, in that practices described often conflicted with the opinion expressed by the senior nurse in that ward or unit. Several senior nurses responded that decisions about these issues were left to the discretion of the person next down the management hierarchy. This could be seen as an abdication of responsibility on the part of senior nurses.

There was a fairly consistent tendency for more senior nurses to express more positive attitudes towards the issues and to describe practices more idealistically than junior nurses. Perhaps senior nurses held more idealistic or enlightened opinions, but it is equally likely to be an expression of their increased awareness of and concern about the "demand characteristics" (Orne, 1962) of the research. Senior nurses may have been more concerned to impress the researcher. Some senior nurses suggested that policies were just about to be developed, which may or may not have been realistic. ✓

There was little indication that patients were encouraged to participate in care planning. Even apparently favourable responses may indicate little more than willingness to give patients information and to seek their agreement about care planned. The notion of relative participation in care planning received even less support. Responses indicated that the idea was unfamiliar and often actively discouraged. Many nurses saw relative participation as limited to providing information to staff and receiving information about the patient's progress.

In the section about patients assisting with their own care there seemed to be general agreement that patients were encouraged to be as independent as possible. Data suggested that patient choice about the amount of participation was limited. It seemed that nurses decided how much patients were "allowed" to do, or what they were "sensible enough" to do, and this decision was then imposed upon the patients. There was some suggestion that patient self-help might not be related to any ideology of care, but rather to the practical limitations of the service available,

Relative participation in care giving seemed generally limited to simple tasks. Although some nurses claimed to encourage this, many wrote that it was allowed if the relative desired. It appeared that nurses were reluctant to ask relatives to undertake care and yet many relatives felt unable to volunteer. Concern about the dangers of relatives "interfering" was apparent. It was clear that when relatives did assist with care, nurses still saw themselves as the experts in charge.

9.1.7.1 What nurses in training are taught about patient and family participation in care.

Responses indicated that little attention was given to these topics in nurses' education, either in the schools of nursing or during ward teaching. Nurses recalled virtually nothing being taught about patient participation in care planning. The most frequent response to the question about the relatives' contribution to care planning was that nothing was taught.

There was wide agreement that nurses were taught to encourage patients to do as much for themselves as possible. In the question about relatives assisting in the care of the patient there was a discrepancy between the views of senior and junior nurses. Seniors were clear that nurses were taught to encourage relative participation whereas juniors saw relative participation as limited to simple tasks under carefully controlled circumstances. Most subjects wrote that nothing had been taught and a few even thought that nurses were taught to discourage relative participation.

The large number of "don't know" responses by trained staff, particularly at H2 suggests a lack of communication between schools of nursing and wards. This must have serious implications for attempts to link learners' theoretical and practical work.

9.2 METHODS

9.2.1 Use of self-completion questionnaires

Early pilot work indicated that abstract concepts of patient and family participation in care were unfamiliar to all subject groups. Simply to ask subjects for their general opinions would produce meaningless results. It was also unclear whether the issue constituted a single clearly defined attitude or a number of unrelated components. It was therefore necessary to break the questions down into separate components and examine each separately. It was hoped that this would also illuminate the nature of the relationships among the components of attitudes to patient and family participation in care.

It proved difficult to develop separate questionnaires which were

meaningful for each subject group, yet similar enough to permit comparisons among the three groups. Consequently, the questionnaires were too long, complicated and tortuously worded in places. The acquiescence tendency of some patients and relatives of low social class and low educational attainment may have resulted from the complexity of the questionnaires. Similarly some subjects exhibited a reluctance to use extreme response categories, clustering responses around the mid-point. These response biases may have distorted the findings to some extent. More rigorous pre-testing might have identified and reduced these problems.

During the study the limitations of survey methods generally became apparent. Had time permitted, additional observations and semi-structured interviews would have been a useful adjunct to the questionnaires and might have provided richer, more meaningful data. Qualitative data are difficult to analyse, but may have been more useful in tapping attitudes towards complex abstract issues. Questionnaires are suitable for obtaining information about purely factual, concrete and superficial information, but are less suitable for complicated, personal and controversial topics. This was reinforced by six respondents who wrote comments on the main attitude scale about the difficulties of having to respond to items on a simple five-point scale. They argued that it was impossible to generalise about complex issues, which depended on individual circumstances.

9.2.2 Questionnaire design

9.2.2.1 General questions

The question about patients' and relatives' knowledge of diagnosis, tests and treatment was invalid. Apart from the subjectivity of the scoring system, the question actually measured how much subjects would bother to write and how much they were prepared to reveal as well as their level of knowledge.

The measurement of social class which consisted of four open-ended questions was cumbersome. Subjects were assigned to five social classes, but it would have been simple and as useful to divide them into working and middle class.

9.2.2.2 Main attitude scale

Because this was an ordinal scale it was only possible to identify that some respondents had more or less positive attitudes, but no absolute meaning could be assumed.

Prior to the pilot study, items were carefully balanced, i.e. the same

numbers in each subscale, of positive and negative wording, and worded generally or specifically. The pilot study disrupted this balance, which reduced the meaningfulness of comparisons among the four subscales as each consisted of a different number of items.

The response biases of acquiescence and neutral responding have already been mentioned. In contrast to the views of French (1981) some subjects were reluctant to express any opinions which could be interpreted as criticising their care. Interpretation of "don't know" responses is also problematic and could mean lack of knowledge, lack of understanding or lack of interest. A four or six point scale which prevents neutral responding would avoid this problem.

9.2.2.3 Nurses' organisation of care scale

This scale asked nurses to generalise about how they organised care in relation to patient and family participation. This was a difficult task because practice presumably varies in different circumstances. Moreover, the correlation between what nurses report they do and what they actually do has been found to be low in previous studies (e.g. Bendall, 1975). Without direct observation to supplement these answers, the validity of this scale is limited. The clear discrepancy between nurses' scores and patients' reports of actual practices on a similar scale further illustrates the inaccuracy of information derived from this scale.

9.2.2.4 Patients'/relatives' involvement in care scale

These scales have similar problems of validity as the nurses' organisation of care scale. Patients and relatives were asked questions about actual practices, which involved generalising from diverse events and relied on memory. It is doubtful whether relatives could provide accurate information, due to the limited time they spend in the ward. Questions about ideal levels of involvement also required subjects to generalise about complex matters and may have been biased in several directions. Respondents may have been reluctant to criticise existing practices by expressing a preference for something different; or they may have been influenced by the demand characteristics of the research and deliberately produced higher scores on the ideal care subscale than the actual care subscale.

9.2.2.5 Care activities in hospital scales

It was difficult to design a scale which was suitable for all subject groups and applicable to both patient and relative participation in care. Because all subjects were given the same list of 20 common care activities, some items were meaningless for one subject group. For example, if a

relative helps a patient to get in and out of bed, this constitutes relative participation in care. If, however, a patient gets in and out of bed unaided, this is basic self-care and should not be described as patient participation in care. Several items can be similarly criticised: it is not really "patient participation" for the patient to make him or herself comfortable in bed or chair, dress or undress him or herself, and wash in bed.

Both patients' and relatives' scales required generalisation and relied on memory, which further reduced validity. Relatives were unlikely to be able to describe patient participation in care accurately, because they were with the patient only a small proportion of the time.

The nurses' version of this scale asked nurses what they considered patients and relatives could do. However, the relationship between hypothetical descriptions and actual practice is doubtful, as previously discussed. It was also artificial to compare nurses' responses, because they were asked different sorts of questions.

The scale used dichotomous responses, in which an item was ticked if it was carried out/could be carried out. It may have been invalid to attach meaning to the absence of response i.e. a blank was assumed to mean that the item was not or could not be carried out. Lack of response may equally indicate a careless error or lack of interest.

9.2.2.6 Nursing process data

The absence of questions about patient and family participation in the evaluation of care could be criticised. Had information about all four stages of NP been examined, the data would be logically more complete. However, in view of the lack of systematic evaluation of care found in most wards, such questions may have further confused subjects.

The scale to measure nurses' attitudes towards NP can be criticised as it is not worded as a conventional Likert or Thurstone-type attitude scale. However, very high inter-item correlation coefficients were found and the scale clearly produced meaningful and coherent data.

9.2.3 Subjects and sample

The sample was small which limits the validity and generalisability of the findings. A larger sample would have been impossible because of lack of resources.

It was difficult to recruit enough relatives to the sample. Both hospitals had unrestricted visiting, but, not surprisingly, relatives were reluctant to use their visits to fill in forms on a subject of limited

interest to them. This may partly explain the general paucity of research on patients' relatives. The lack of personal contact between researcher and relatives presumably reduced their interest in and commitment to the study and may have biased the results. It is preferable to avoid designs in which contact with one group of subjects is through another group of subjects, especially if the results from the two groups are going to be compared. The response rate from relatives (69% and 74%) was lower in both hospitals than patients' or nurses' response rates. To increase the numbers it was eventually necessary to recruit relatives who were not attached to patients in the sample. Some relatives did not fulfil all the criteria for inclusion.

It was impossible to obtain the sample of nurses specified in the design. There were too few respondents of NO grade or above, so ward-based nurses were correspondingly over-represented.

Two very different general hospitals were used for data collection to increase generalisability of the findings. However, both were located in London, which limits their relevance to other parts of Britain. The pilot study was also in London, but in an oncology hospital. Pilot studies should have been carried out in medical and surgical wards of a third general hospital, where subjects would be similar to those in the main study. Oncology patients, their families and nurses may systematically differ from general hospital subjects because of the seriousness and psychological implications of malignant disease.

9.2.4 Data analysis

At the 5% level of significance it is probable that one in 20 statistical tests will produce spuriously significant results. Even at the more rigorous 1% level, one test in every 100 is likely to produce a false significant result. In this computer analysed study, many hundreds of statistical tests were performed, inevitably producing some results which are statistically significant, but of dubious psychological significance. "Number crunching" was avoided as far as possible, and tests were only carried out if there was reason to postulate the existence of a difference or relationship between variables.

As various types of data were produced, a variety of statistical tests were employed. Some, but not all the data were suitable for parametric analysis, so both parametric and non-parametric tests have been used as appropriate. In view of the very slight effect of violating the assumptions of parametric tests discussed in Section 7.3.2.5, ANOVA and t tests were used as long as there were no serious justifications for not using them.

A major problem in the analysis concerned cross-tabulations. Subjects' cumulative scores on the main scales were cross-tabulated to explore relationships among scales. However, this produced some excessively large and unwieldy contingency tables, which despite some statistically significant χ^2 values, could not readily be interpreted. In some cases the assumptions of the χ^2 test were violated because of the small expected cell frequencies. Therefore, the results of cross-tabulations have been interpreted cautiously and are only reported when the tables were small enough to reveal meaningful associations on visual inspection as well as apparent statistical significance. Collapsing cells to produce smaller contingency tables would have required complex re-coding and re-analysis, which was beyond the time constraints of this study.

An associated problem concerned the magnitude of correlations. Many statistically significant correlations were small, in the order of 0.2 or 0.3. This was particularly noticeable in the analysis of reliability data reported in Section 7.4.2. Low correlation coefficients, even if statistically significant, indicate only a weak relationship between variables, as only a small proportion of the variance is explained by the association between them. The reliability analysis also produced a great many statistically significant correlations, some of which may have occurred by chance, as discussed earlier.

9.2.5 Subjects' comments

Many general and specific comments were recorded by subjects in various parts of the questionnaires. Initial classification was carried out by the researcher, who then collaborated with three graduates (a chemist, a physicist and a civil engineer) to complete the content analysis. The collaborators were asked to examine all comments and identify one or more categories which described them. They were also asked to select one comment from each category which best typified that category for quotation.

All except three or four of the comments were relevant to the general themes of the questionnaires, which demonstrates that subjects understood the issues under consideration. This is further evidence of the face validity of the scales, although subjects who did not write comments may not have understood the issues. Cross-tabulations revealed that there were no detectable differences between subjects who did and did not write comments.

Comments were written on each of the major sections of the questionnaires, as shown below:

Table 9.1 See overleaf (p. 305)

Table 9.1.

Percentage of subjects who wrote comments on each section of the questionnaire

| Section | total | nurses | patients | relatiyes |
|--------------------------------------------|-------|--------|----------|-----------|
| main attitude scale | 16.4 | 28.0 | 10.5 | 8.3 |
| organisation/involvement in care scales | 3.4 | 7.5 | 2.0 | 0 |
| care activities scales | 13.7 | 30.8 | 4.4 | 2.8 |
| attitudes to nursing process scale | 29.9 | 29.9 | N/A | N/A |

More nurses wrote comments on every section. Only a few patients and relatives wrote comments, although slightly more patients than relatives did so. These discrepancies were probably due to nurses' greater interest in the topic and therefore greater enthusiasm to express their opinions. Nurses were also better educated than the other two groups, so presumably more confident about writing.

9.2.6 Overall evaluation of methods used

Due to the paucity of empirical research in this area it was essential to obtain data on current practices and attitudes among relevant subject groups. This provides a baseline upon which further experimental studies of patient and family participation in nursing may be developed.

During the course of this study the limitations of survey methods generally, and these questionnaires in particular, became very apparent. Self-completion questionnaires may not be the best way of obtaining data about the complex, abstract and controversial subject of patient and family participation in care. Had time permitted observation and semi-structured interviews would have increased confidence in the findings.

Nevertheless, this method still achieved the overall aims of the study and provided some evidence in relation to the hypotheses. The scales achieved a moderate degree of validity and reliability, although some modifications would be recommended if they were to be used again.

PART 3 : DEVELOPMENT OF A SCALE TO MEASURE THE USE
OF NURSING PROCESS IN HOSPITAL WARDS

PART 3. CHAPTER 10.INTRODUCTION AND SCALE DEVELOPMENT

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PART 3 CHAPTER 10.

INTRODUCTION AND SCALE DEVELOPMENT

10.1 INTRODUCTION

Part 3 describes the development of a scale to measure the use of NP in hospital wards. Chapter 10 introduces the study, describes the development of the first version of the scale from the literature, and describes how the scale was exposed to preliminary validity testing by a panel of experts. Chapter 11 discusses how the scale was tested for validity, reliability and sensitivity. Chapter 12 contains the results of the validity, reliability and sensitivity testing. Chapter 13 is a discussion of the study and includes a critical examination of the methods used and the completed instrument.

10.1.1 Reasons for the study

As discussed in Section 4.2.5 of the literature review, many writers consider patient and family participation to be an essential part of the NP. It was therefore necessary to include an examination of the relationship between patient and family participation in care and the use of NP in the survey discussed in Part 2. In order to do this wards which were and were not using NP had to be identified. Early in the pilot work it became apparent that it was not adequate to rely on reports from ward staff about the use of NP, as the concepts were much misunderstood. Some objective indicators were needed. A review of the literature revealed an absence of objective criteria which could be used to measure the use of NP. It was therefore necessary to develop a scale against which the use of NP could be evaluated.

10.1.2 Aims of the study

The aim of this study was to develop a scale to measure the use of NP. No arbitrary definition of NP was imposed at the beginning of the study. It was decided that the series of items derived from the literature and incorporated into the scale would operationally define NP. The definition would be modified by the views of the panel of British nurses reputed to be experts on the NP.

It was considered important that the scale should possess the qualities required of criterion measures in nursing and identified in Section 4.4.2 of the literature review. These are that a criterion measure should be valid, reliable, sensitive, precise, measurable, discrete, readily understood, meaningful, relevant and comprehensive.

The scale was intended primarily for use in the survey of patient and family participation, but could be used generally as a research instrument to discriminate among wards according to how fully NP is being used. It could also be used by ward nurses or nurse managers as an auditing tool or self-assessment tool to examine the use of NP, or to guide nurses in the introduction and development of NP.

The study aimed to develop an ordinal scale, because the complexity of producing an interval scale was beyond the scope of this research, and probably impossible. Nevertheless broad categories of meaning could be assigned to scores within particular numerical ranges. The scale was intended to measure one aspect of the process of care, but does not measure the outcomes of care (see Section 4.4. of the literature review). Judgments about the quality of care on the basis of these scores is not therefore possible.

The scale is intended mainly for use with groups of patients in wards, but could be readily modified for use with individual patients. The scale is intended for use with physically ill general hospital in-patients. With minor alterations it would however be suitable for use with other types of patients, such as the mentally ill or handicapped.

10.2 DEVELOPMENT OF FIRST DRAFT OF THE SCALE FROM THE LITERATURE

The first task was to survey the extensive literature, and several hundred mainly American and British books and articles on the NP were examined. This literature was reviewed in Section 4.2. All statements in the literature which described the practical use of NP in general hospitals were listed, but only those items which were independently suggested by at least three writers were retained.

65 items which appeared to be reasonably discrete emerged and these were grouped under six headings:

- general points,
- nursing assessment,
- nursing diagnosis,
- planning of nursing care,
- implementation of nursing care, and
- evaluation of nursing care

The section on general points described the circumstances which facilitate use of NP. There were not equal numbers of items in each section, because there was no reason to assume that each section was of equivalent importance. The sections were just a convenient method of classifying the items, similar to the classification systems used in the literature.

To achieve a consistent style, items were reworded by turning them into questions to which an affirmative answer would indicate use of NP.

Figure 10.1 (see over, page 311.), illustrates eleven typical examples of statements derived from the literature and their three or more authors. The rewording of the statements is also illustrated. A list of the 65 items in the original scale is at Appendix Part 3 Number 1.

10.3 INITIAL VALIDATION OF THE SCALE BY A PANEL OF EXPERTS

Much of the literature consulted in the development of the scale was American, and may describe practices different from those used in Britain. It was therefore necessary to obtain the opinions of a group of British nurses, knowledgeable about the use of NP in this country. Furthermore, the use of expert opinion, both from the literature and from panels of subject-matter experts, is an accepted technique for establishing content validity during the development of a test (Anastasi, 1976).

10.3.1 The procedure

The names of 50 British nurses reputed to have considerable knowledge or experience of the NP were identified from the literature and with assistance from colleagues in the Department of Nursing Studies, Chelsea College, the Rcn and the Advisor/ Coordinator for the Nursing Process at the DHSS .

In April 1980 each member of the panel was sent a copy of the scale (Appendix Part 3 Number 1); a letter requesting his or her participation in the validation exercise (Appendix Part 3 Number 2); instructions for validation of the scale (Appendix Part 3 Number 3); and a stamped self-addressed envelope.

The letter briefly explained the nature of the study and the validation exercise. Members of the panel were asked to rate the importance of each of the 65 items to the successful practical use of NP on a scale from 0 - 5. The instructions sent to the experts included details of the scoring system as follows:

- " 5. Absolutely essential. Without this the ward cannot be said to be using the nursing process;
- 4. Very important, but not absolutely essential;
- 3. Moderately important;
- 2. Of slight importance only;
- 1. Of no real importance, although a part of nursing process;
- 0. Totally irrelevant. This has nothing to do with nursing process . "

Figure 10.1 Examples of statements describing the practical use of NP, made by at least three writers, and how these were reworded as items in the first version of the scale

| Statements in the literature | Statement written by: | Section of the scale | Statement reworded as: |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
| Education of student and qualified nurses is essential for the successful implementation of NP | Crow, 1977; McGilloway, 1980; Darcy, 1980 | General Points Question 6 | Is the nursing process taught to learners in the School of Nursing ? |
| A nursing history or patient assessment form is completed | Marriner, 1979; Rcn, 1979; Castledine, 1981; Crow, 1979; Mayers, 1978 | Nursing Assessment Question 3 | Is a written nursing history taken using a systematic format ? |
| Nursing problems are identified for all new patients | Hunt and Marks-Maran, 1980; Yura and Walsh, 1978; Cornack, 1980; Duberley, 1977 | Nursing Diagnosis Question 1 | Are nursing problems identified for all new patients, prior to implementing nursing care ? |
| The problems are arranged in a hierarchy of importance | Berggren and Zagornick, 1968; Lewis, 1977; Yura and Walsh, 1978 | Nursing Diagnosis Question 5 | Are the problem statements arranged in a hierarchy of importance i.e. are priorities identified ? |
| Subjective validation of problems by asking the patient is essential | Carrieri and Sitzman, 1971; Bedard, 1967; Crow, 1979; Luker, 1979 | Nursing Diagnosis Question 7 | Are the existence of problems validated by asking the patient what he perceives his problems to be ? |
| The written care plan must be updated regularly | Little and Carnevali, 1976; Roper et al, 1981; Marriner, 1979 | Planning of Nursing Care Question 2 | Is the written care plan regularly updated ? |
| The goals must be acceptable to the patient | Rcn, 1979; Marriner, 1979; Crow et al, 1979 | Planning of Nursing Care Question 12 | Are the goals agreed upon with the patient and/or his family ? |

Cont...

Figure 10.1 (cont.)

| Statements in the literature: | Statement written by: | Section of the scale | Statement reworded as: |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Decisions about care to be given should not be taken without the patient's involvement or knowledge | Schaeffer, 1974; Marriner, 1980; Rcn, 1979; Crow et al, 1979. | Planning Nursing Care Question 19 | Are planned nursing actions agreed upon with the patient and/or his family ? |
| Evaluation should be recorded in the nursing documents | McFarlane and Castledine, 1982; Luker, 1979 Hunt, 1978 | Evaluation of Nursing Care Question 2 | Is evaluation recorded on either the care plan or the progress notes ? |
| The patient and his family have a major part to play in the evaluation of care | Rcn, 1979; Lewis, 1968; Breckman, 1979 | Evaluation of Nursing Care Question 5 | Are the patient and/or his family included in evaluation ? |
| Objective outcome criteria are needed for the evaluation of care | Wilson-Barnett, 1981; Van Maanen, 1981; Yura and Walsh, 1978; McMahon, 1973 | Evaluation of Nursing Care Question 7 | Is any attempt being made to develop objective outcome criteria against which care can be evaluated ? |

The experts were asked for general comments, comments on specific items and to add any additional items which should be included. The experts were informed that their contribution would be acknowledged in the report of the study. They were invited to include their names on their replies, but were given the option of anonymity if they preferred.

Letters of thanks were sent to the members of the panel who returned completed forms (Appendix Part 3 Number 4). Letters of reminder were sent to subjects who had not replied after four weeks (Appendix Part 3 Number 5).

10.3.2 Response rates and characteristics of the members of the panel of experts

50 nurses were invited to participate in the validation exercise and replies were received from 46 (92%). Of those, 37 (74%) completed the forms as requested and nine (18%) refused to participate. Four people (8%) did not reply despite the letter of reminder. Therefore a response rate of 74% ($n = 37$) was achieved.

Figure 10.2

Reasons for non-completion of the nursing process scale validation exercise

| Reasons for non-completion | Number of subjects | How information obtained |
|------------------------------------------|--------------------|--------------------------|
| Reservations about quantification of NP | 2 |) |
| Did not understand the research question | 1 |) subjects |
| Lack of knowledge at practical level | 3 |) wrote letter |
| No longer working | 2 |) to researcher |
| Lost in post | 1 |) (n = 9) |
| Reasons unknown | 4 |) |
| | | No reply received |
| Total 13 | | |

Figure 10.3

Classification of current and recent appointments/experience of members of the panel of NP experts (n = 37) and non-responding subjects (n = 13).

N.B.

Categories are not mutually exclusive, and some subjects are classified in as many as three categories.

| Appointments/experience of subjects | Members of the panel (n = 37) | Non-responding subjects (n = 13) |
|-----------------------------------------------------------|-------------------------------|----------------------------------|
| Member of Rcn Working Party on NP | 10 | 4 |
| Sisters/Charge nurses with practical experience of NP | 4 | 0 |
| Nurse managers who have organised or supervised NP | 10 | 2 |
| Nurse teachers who have organised or supervised NP | 6 | 1 |
| Authors of well-known publications on NP | 10 | 3 |
| NP research or research supervisors | 11 | 3 |
| Government nursing officers concerned with NP | 2 | 1 |
| University/polytechnic nursing lecturers/senior lecturers | 10 | 3 |
| Professors of nursing | 2 | 0 |
| Totals | 65 | 17 |

The high response rate reflected the high level of interest in the research, especially as many subjects who were unable to complete the validation exercise wrote to explain their reasons. Only two of the 50 subjects expressed serious reservations about the feasibility of developing a scale. Figure 10.3 shows the broad range of relevant experience possessed by the experts, many of whom were experienced in two or more categories. There appeared to be no systematic differences between subjects who did and who did not complete the validation exercise.

10.3.3 Treatment of results

Numerical ratings (0 - 5) from each subject for each item were transferred to a large coding sheet. The actual number and percentage of responses in each response category (0 - 5) were tabulated for each item and were used to calculate the mean, mode and median scores and the standard deviation. In this study the lower the average scores

for the item, the less important the NP experts considered that item to be to the use of NP. The higher the standard deviation for the item, the greater the spread of responses from the experts, and therefore the less consensus. The experts' comments on each question were also tabulated, to be considered in conjunction with the numerical data.

Constraints of space prevent full presentation of data for each of the 65 items. Complete data for the first three items only are included to illustrate how the data were tabulated. Results for the remaining 62 items are presented in summary only. General comments and suggestions for additional items are also discussed.

10.3.4 Results

Standard deviations and means were ranked (Table 10.1) from 1 to 65. High rank equals high standard deviation, but high rank equals low mean. There was a significant positive correlation, using the Spearman rank-order correlation coefficient (the Spearman r_s) between rankings for the mean and the standard deviation:

$$r_s = 0.887$$

$$p < .001$$

This shows that items about which the experts disagreed (high standard deviation) were also items which they scored as less important (low mean).

10.3.4.1 Criteria for discarding items

It was hoped that this exercise would enable the scale to be shortened by about a third, retaining only items which were powerful discriminators. The following criteria for discarding items were intended only as guidelines, as both the comments and the numerical scores for each item had to be examined as a whole:

- low mean and high standard deviation, as shown by ranks in the top third (ranks 44 - 65) for both mean and standard deviation
- low median and/or mode i.e. less than 4; and
- consistently critical comments.

Table 10.1— see overleaf (p316.)

Table 10.1

Summary of actual and ranked scores from the panel of experts' validation exercise

General Points

| Question numbers: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----------------------------|------|------|------|------|------|------|-----|------|------|------|------|------|
| standard deviation | 1.4 | 1.11 | 1.18 | 0.95 | 0.95 | 0.8 | 1.3 | 1.16 | 1.5 | 1.2 | 0.92 | 1.35 |
| rank of standard deviation | 56 | 43.5 | 47 | 33.5 | 33.5 | 27 | 54 | 45.5 | 58 | 48.5 | 31 | 55 |
| mean | 4.17 | 4.22 | 3.08 | 4.57 | 4.57 | 4.31 | 3.2 | 3.5 | 3.5 | 3.97 | 4.24 | 4.22 |
| rank of mean | 42.5 | 37.5 | 62 | 20 | 20 | 31 | 60 | 55.5 | 55.5 | 48 | 35 | 37.5 |
| median | 5 | 5 | 3 | 5 | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 5 |
| mode | 5 | 5 | 3 | 5 | 5 | 5 | 4 | 4 | 4/5 | 4 | 5 | 5 |

Nursing Assessment

| Question numbers: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| standard deviation | 0.42 | 0.49 | 0.51 | 0.76 | 1.26 | 1.07 | 0.31 | 0.32 | 0.5 | 0.65 |
| rank of standard deviation | 6.5 | 10 | 14 | 25 | 51.5 | 40 | 3 | 4 | 12.5 | 20 |
| mean | 4.78 | 4.76 | 4.73 | 4.24 | 3.86 | 4.09 | 4.89 | 4.89 | 4.75 | 4.44 |
| rank of mean | 8 | 10 | 14 | 36 | 51 | 45 | 4 | 4 | .13 | 27.5 |
| median | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| mode | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |

Table 10.1
cont...

Table 10.1 (cont.) (2 of 3)
Nursing Diagnosis

| Question numbers: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------------|------|------|------|------|------|------|------|
| standard deviation | 0.43 | 0.55 | 1.2 | 1.03 | 0.97 | 0.82 | 0.94 |
| rank of standard deviation | 8 | 15 | 48.5 | 38 | 35.5 | 28 | 32 |
| mean | 4.76 | 4.58 | 3.43 | 4.56 | 4.17 | 4.19 | 4.29 |
| rank of mean | 10 | 18 | 56 | 22 | 42.5 | 39 | 33 |
| median | 5 | 5 | 4 | 5 | 4 | 4 | 5 |
| mode | 5 | 5 | 4 | 5 | 4 | 4 | 5 |

Planning of Nursing Care

| Question numbers: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|----------------------------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| standard deviation | 0.23 | 0 | 0.65 | 1.6 | 1.16 | 1.45 | 1.73 | 1.64 | 1.05 | 0.61 | 0.78 | 1 | 0.74 | 1.09 | 0.72 | 0.9 | 1.11 | 1.1 | 0.89 | 0.61 |
| rank of standard deviation | 2 | 1 | 20 | 59 | 45.5 | 57 | 62 | 60 | 39 | 17.5 | 26 | 37 | 24 | 41 | 23 | 30 | 43.5 | 42 | 29 | 17.5 |
| mean | 4.94 | 5 | 4.44 | 3.14 | 3.58 | 3.69 | 2.2 | 3.03 | 4.5 | 4.76 | 4.36 | 4.18 | 4.54 | 4.29 | 4.69 | 4.18 | 3.91 | 4.62 | 4.06 | 4.57 |
| rank of mean | 2 | 1 | 27.5 | 61 | 54 | 53 | 65 | 63 | 24 | 10 | 30 | 40 | 23 | 31 | 15 | 40.5 | 49.5 | 17 | 46 | 20 |
| median | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 |
| mode | 5 | 5 | 5 | 4 | 4 | 4 | 0/3 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 5 |

Table 10.1
cont...

Table 10.1 (cont.) (3 of 3)
Implementation of Nursing Care

| Question numbers: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------------|------|------|------|------|------|------|------|------|
| standard deviation | 1.27 | 0.42 | 0.40 | 0.49 | 1.21 | 1.77 | 1.99 | 1.72 |
| rank of standard deviation | 53 | 6.5 | 5 | 10 | 50 | 63 | 65 | 61 |
| mean | 4.47 | 4.86 | 4.89 | 4.86 | 4.24 | 3.3 | 3.37 | 3.91 |
| rank of mean | 25 | 7 | 4 | 7 | 35 | 59 | 57 | 49.5 |
| median | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 |
| mode | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 |

Evaluation of Nursing Care

| Question numbers: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------------|------|------|------|------|------|------|------|------|
| standard deviation | 0.97 | 0.5 | 0.56 | 0.65 | 0.7 | 0.49 | 1.26 | 1.88 |
| rank of standard deviation | 35.5 | 12.5 | 16 | 20 | 22 | 10 | 51.5 | 64 |
| mean | 4.63 | 4.76 | 4.47 | 4.43 | 4.12 | 4.86 | 3.7 | 2.71 |
| rank of mean | 16 | 10 | 25.5 | 29 | 44 | 7 | 52 | 64 |
| median | 5 | 5 | 4.5 | 5 | 4 | 5 | 4 | 3 |
| mode | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 0/4 |

Range of Standard Deviation: 0 - 1.99

Range of mean: 2.2 - 5

Range of median. 3 - 5

Range of mode: 0 - 5

10.3.4.2 Analysis of experts' responses to content validation exercise

General Points, Question 1.

"Is nursing process used for all patients on the ward ?"

| response category | 0 | 1 | 2 | 3 | 4 | 5 | blank | total |
|----------------------------|---|---|---|---|----|----|-------|-------|
| actual number of responses | 3 | 0 | 0 | 2 | 11 | 20 | 1 | 37 |
| percentage of responses | 8 | 0 | 0 | 5 | 30 | 54 | 3 | 100% |

Table 10.2

Actual number and percentage of responses in each response category, for General Points, Question 1.

total number of respondents 36

mean 4.17 (rank 42.5)

median 5

mode 5

standard deviation 1.4 (rank 56)

Comments on Question 1.

• "begs question on what NP is"

"used - don't like this wording"

"NP could apply to one patient initially"

"response during implementation quite different from later stages"

"Will the nurse know the meaning of NP as you define it ? Should you define it more specifically for questions 1 - 5 ?"

"In early stages, this may not be feasible or desirable "

"It could be used for some"

"Very difficult to rate the whole of this general comments section. You may have to strengthen them"

Discussion

The high standard deviation indicated a fair degree of disagreement about this item. Several comments implied that the question was tautological and that it was not essential for NP to be used for all patients, at least initially.

Decision

The question was discarded.

General Points, Question 2

"When using nursing process, are learners supervised by qualified staff ?"

| response category | 0 | 1 | 2 | 3 | 4 | 5 | blank | total |
|----------------------------|---|---|---|----|----|----|-------|-------|
| actual number of responses | 1 | 0 | 1 | 5 | 9 | 19 | 2 | 37 |
| percentage of responses | 3 | 0 | 3 | 14 | 24 | 51 | 5 | 100% |

Table 10.3

Actual number and percentage of responses in each response category, for General Points, Question 2.

total number of respondents 35

mean 4.22 (rank 37.5)

median 5

mode 5

standard deviation 1.11 (rank 43.5)

Comments on Question 2

"grade of learner ? Experience with NP ? Are care plans checked by SRN ?"

"learners ? nurses learning the NP or student/pupil nurses. Depends if they are expert in NP".

"used - don't like this wording. Does this mean all learners are supervised all the time ?"

"depends - some students after a while require little if any supervision, but generally sister would take accountability"

"although non-supervised implementation will occur".

"Essential that learners are supervised by qualified staff, whatever method of planning nursing care is being used. Therefore question ambiguous"

"What does" when using the NP"mean ? Is it one particular element e.g. assessment or what ? All learners should be supervised by qualified staff, regardless of NP, therefore answer likely to be superficial"

Discussion

The comments that all learners should be supervised irrespective of whether NP is used, revealed the ambiguity of this question. The question examines an aspect of the organisation of care which is irrelevant to the use of NP. The question is also vague about when and how the learner should be supervised.

Decision

The question was discarded.

General Points Question 3.

"Are books and articles on the nursing process available on the ward ?"

| response category | 0 | 1 | 2 | 3 | 4 | 5 | blank | total |
|----------------------------|---|---|----|----|----|---|-------|-------|
| actual number of responses | 2 | 1 | 5 | 15 | 10 | 3 | 1 | 37 |
| percentage of responses | 5 | 3 | 14 | 40 | 27 | 8 | 3 | 100% |

Table 10.4

Actual number and percentage of responses in each response category, for General Points Question 3.

total number of respondents 36

mean 3.08 (rank 62)

median 3

mode 3

standard deviation 1.18 (rank 47)

Comments on Question 3.

"Articles yes, books no. Staff can usually only find time for short reading material"

"Difficult - books on NP are relevant to NP, but don't have to be on the ward for NP to be used"

"Doctors practice the medical process without access to books and articles on the subject"

"Could be available in library"

Discussion

This item had one of the lowest mean scores (mean 3.08, rank 62) which indicated that the availability of NP literature on the ward was not considered important to the use of NP. This is also reflected in the comments

Decision

The question was discarded.

10.3.4.3 Summary results for other items in the scale

General Points Question 4

"Have any of the following been held to teach NP to ward staff: study days, lectures, discussion groups or tutorials ?"

Seven subjects commented and all agreed that this was important. The item had a high mean score (4.57) and was therefore retained. The wording was slightly altered.

General Points, Question 5

"Have all the permanent ward nursing staff attended at least one study day, lecture, discussion group or tutorial on the NP ?"

This item had exactly the same mean and standard deviation as Question 4. Comments indicated that the item was regarded as important. The wording was slightly altered, but the item retained.

General Points, Question 6

"Is the NP taught to learners in the School of Nursing ?"

This item had a fairly high mean (4.31) and was retained.

General Points, Question 7.

"Do the ward medical staff understand and support the use of the NP ?"

Five comments indicated that support from medical staff was an advantage, but not essential. With a mean of only 3.2 (rank 60) this was seen as one of the least important items. It was discarded.

General Points, Question 8.

"Do the various wards using the NP communicate with each other about their difficulties, successes, etc. ?"

There were no comments. The mean of this item was ranked at 55.5, indicating that this was one of the least important items. It was discarded.

General Points, Question 9.

"Is there a committee or person responsible for coordination and implementation of the NP throughout the hospital ?"

The mean of this item shared rank 55.5 with the previous question and had a very high standard deviation, rank 58. Two comments indicated that although central coordination was helpful it was not essential. One subject commented negatively about nurse managers controlling clinical functions. The question was discarded.

General Points, Question 10

"Do the senior nursing management understand and support the use of NP ?"

Support from nursing management was seen as more important than support from medical staff, but the ranks of both mean and standard deviation were high (48 and 48.5 respectively). Comments suggested variations in opinion, some saw this as essential, others as irrelevant and some made critical comments about nurse managers' lack of understanding of clinical developments. The question was discarded.

General Points, Question 11

"Could the Ward Sister's administrative style be described as that of participative management ?"

The high mean and low standard deviation indicate that this was thought to be important. There were six comments criticising the wording of the item which was not clear. The question was reworded as: "Could the ward sister be described as democratic i.e. does she involve nurses in decisions and does she delegate responsibility ?" The reworded question was discussed with three members of the panel of experts, all of whom found the new version easier to understand.

General Points, Question 12

"Is the NP recognised by ward staff as having a cyclical nature ?"

Six comments indicated that the meaning of this question was unclear and that it would be difficult to find evidence of this. Because there was a lack of consensus about this question (standard deviation rank 55) it was discarded.

Only four of the original 12 questions in this section were retained, and one was substantially reworded.

Nursing Assessment Question 1

"Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients ?"

28 subjects gave a score of 5 and eight gave a score of 4 to this item, indicating that the item was considered very important. Two subjects commented that this could and should be done irrespective of whether NP was being used. Because of the high numerical scores the question was retained.

Nursing Assessment Question 2

"Is an assessment made of all new patients prior to implementing nursing care ?"

29 subjects scored 5 and seven subjects scored 4 on this item, indicating as in the previous question that this was considered very important. About ten subjects criticised the word "all" because of the requirements of an acute emergency, where a brief initial assessment takes place almost simultaneously with the giving of life-saving care. The word "all" was removed from the question.

Nursing Assessment Question 3

"Is a written nursing history taken, using a systematic format ?"

Ranks of 14 for both the mean and the standard deviation demonstrated that this question was considered very important. The question was retained.

Nursing Assessment Question 4

"Is the nursing history usually taken within 24 hours of admission ?"

This question was rated as less important than the previous one, having mode and median scores of four and a mean of 4.24. Ten subjects commented that it may take longer than 24 hours to collect all necessary information, but that a preliminary assessment would be made within 24 hours. The question was retained.

Nursing Assessment Question 5

"Is the nursing history taken during a friendly conversation, rather than just as a list of formal questions ?"

Rankings of 51 and 51.5 for standard deviation and mean respectively indicated lack of agreement and low mean scores on this item. There were 12 comments mainly about the great variation in the way nursing assessment is carried out and that probably a mixture of the two was ideal. One expert considered that the question referred to the quality of the NP, rather than just the extent to which it was being used. The question was discarded.

Nursing Assessment Question 6

"Is the patient's family invited to contribute information during assessment ?"

There was much disagreement about this. Eight subjects commented that it depended on a variety of circumstances and was not always appropriate. In addition the question had a fairly low mean score (4.09) and a rank of 45, so it was discarded.

Nursing Assessment Question 7

"Are nursing observations made of the patient's physical state ?"

33 experts gave a score of 5 and four scored 4, therefore this question had a very high mean score which ranked joint number 4 with the next item. Because of the numerical score the item was retained, but some critical comments were noted. Three experts argued that this was important irrespective of the NP, so every nurse would answer yes to this question.

Nursing Assessment Question 8

"Are nursing observations made of the patient's psychological state ?"

This item ranked joint number 4 with the previous item for the mean score, and had a very low standard deviation, also ranking number 4. The item was retained, but similar critical comments were noted as for the previous question.

Nursing Assessment Question 9

"Are nursing observations made of the patient's social and economic state ?"

Although not rated as important as physical and psychological observations, this question was still rated as fairly important, with ranks of 13 and 12.5 for mean and standard deviation respectively. Two subjects commented that observations of economic status were not always relevant.

Nursing Assessment Question 10

"Are other data bases used in assessment, e.g. medical notes or district nurses' notes ?"

This achieved moderately high scores, with ranks of 20 and 27.5 for standard deviation and mean respectively. One subject commented that the term data bases was unnecessarily obscure (Subject number 18). The question was retained, with the term "information sources" replacing "data bases".

The section on nursing assessment was not greatly changed, losing just two out of ten questions and making minor alterations to the wording of another two questions.

Nursing Diagnosis Question 1

"Are nursing problems identified for all new patients, prior to implementing nursing care ?"

This item was rated as very important with ranks of 8 and 10 for standard deviation and mean respectively. A few experts commented that emergency treatment may preclude this, so it is not applicable to all patients. The item was retained.

Nursing Diagnosis Question 2

"Are potential and/or possible problems identified as well as actual problems ?"

This item was rated as moderately important with ranks of 15 and 18 for standard deviation and mean respectively, and was retained.

Nursing Diagnosis Question 3

"Is a typology or check`list used to assist in the identification of problems e.g. Henderson's (1966) Activities of Daily Living, or Abdellah's 21 problems ?"

This was not rated highly with a mean of only 3.43 (rank 56). There was much disagreement about this, and a high standard deviation (rank 48.5). Comments implied that if a typology was used, it should be incorporated into the nursing history form. The item was discarded.

Nursing Diagnosis Question 4

"Is an attempt made to identify the causes of the patient's problems e.g. physical, social, psychological or economic ?"

This had a moderately high mean score of 4.56 (rank 22) and was retained. It was reworded as "Is an attempt made to find the causes of the patient's problems e.g. psychological, social etc. ?"

Nursing Diagnosis Question 5

"Are the problem statements arranged in a hierarchy of importance i.e. are priorities identified ?"

With a mean of 4.17 (rank 42.5) this was close to the borderline for rejection. However the only comments were that the priority order can rapidly change and the item was retained.

Nursing Diagnosis Question 6

"Is the statement of problems (nursing diagnosis) made with the knowledge and agreement of the patient ?"

There were twelve comments that although generally desirable, this is not always possible. The term nursing diagnosis was disliked and several experts commented that this item overlapped with Question 7. With a mean of 4.19 (rank 39) this item was close to the borderline for rejection. However it was retained and reworded as "Is the statement of problems made with the knowledge, understanding and agreement of the patient ?"

Nursing Diagnosis Question 7

"Are the existence of problems validated by asking the patient what he perceives his problems to be ?"

Comments indicated that this would be done only if appropriate. Although this item had a moderately high mean (4.29 rank 33) it was discarded because of the overlap with the previous question identified by three of the experts.

Two questions out of seven were discarded from the Nursing Diagnosis section and two were reworded. Four of the panel disliked the term nursing diagnosis because of its unfamiliarity with British nurses. This section was therefore incorporated into the previous section as formulation

of the nursing diagnosis can be seen as the final stage of nursing assessment (World Health Organisation, 1976) .

Planning of Nursing Care Question 1

"Is a written care plan produced which incorporates problem statements ?"

This was rated as the second most important item (mean 4.94 standard deviation 0.23). One expert suggested the addition of patients' needs (subject number 5) so the item was reworded as "Is a written care plan produced which incorporates patient's problems and/or needs ?"

Planning of Nursing Care Question 2

"Is the written care plan regularly updated ?"

All 37 members of the panel scored this item as 5, thus suggesting it was the single most important item. Because of redundancy, the word "written" was deleted.

Planning of Nursing Care Question 3

"Are nursing care planning conferences or discussions held on the ward ?"

This had a fairly high mean (4.44 rank 27.5) and was thus retained as a fairly important item. Several experts suggested that Questions 3 and 4 could be amalgamated as they concerned the same basic idea. The item was reworded to include rounds.

Planning of Nursing Care Question 4

"Are nursing rounds held on the ward ?"

Comments suggested that the intended meaning of this item was not clear. It had a very low mean (3.14) and very high standard deviation (1.6) and was therefore discarded.

Planning of Nursing Care Question 5

"Are multidisciplinary ward conferences or discussions held to discuss patient problems ?"

This achieved a low mean score (3.58) and high standard deviation (1.16). One subject commented that although useful this was not necessarily associated with the nursing process. It was discarded.

Planning of Nursing Care Question 6

"Is the same nurse responsible for the entire assessment and planning of one patient's care ?"

This had a fairly low mean (3.69 rank 53) and high standard deviation (1.45 rank 57) and was therefore discarded. Comments indicated that it

was unclear whether this referred only to admission or during the whole of the patient's stay.

Planning of Nursing Care Question 7

"Is the care plan kept at the patient's bedside ?"

This item was rated as the least important in the whole scale (mean 2.2) and was therefore discarded. Seven of the experts expressed reasons why it should not be kept at the bedside e.g. available to visitors, problem of censorship, psychiatric patients, terminally ill, etc.

Planning of Nursing Care Question 8

"Is the patient allowed to see his care plan ?"

This was rated as one of the least important items (mean 3.03 rank 63). Comments indicated that this would be decided on an individual basis. The item was discarded.

Planning of Nursing Care Question 9

"Does the care plan include discharge planning ?"

This item was retained as it had a mean of 4.5 (rank 24) and no critical comments.

Planning of Nursing Care Question 10

"Are goals (nursing objectives) incorporated into the care plan ?"

With a mean of 4.76 this was considered to be very important (rank 10 for mean). It was retained.

Planning of Nursing Care Question 11

"Does the statement of goals include both long-term and short-term (proximate) goals ?"

This had a moderately high mean of 4.36 (rank 30) and was retained. Some subjects commented that it may not be possible to formulate long-term goals immediately. The word proximate was deleted as it is rarely used in Britain.

Planning of Nursing Care Question 12

"Are the goals agreed upon with the patient and his family ?"

With a mean of 4.18 (rank 40) this was close to the borderline of rejection. Comments from six experts indicated that this was done if possible and appropriate. The item was retained.

Planning of Nursing Care Question 13

"Are the goals always realistic ?"

This had a fairly high mean score of 4.54 (rank 23) and was thus retained. Only two subjects questioned how this could be defined and assessed.

Planning of Nursing Care Question 14

"Are the goals always precise and very specific ?"

Although this had a moderately high mean of 4.29, there was much disagreement about this item with a standard deviation of 1.09 (rank 41). Five subjects commented critically about this item, which was discarded.

Planning of Nursing Care Question 15

"Are the goals patient centred, i.e. written in terms of patient outcomes or behaviour ?"

This had a very high mean of 4.69 (rank 15) and no critical comments. It was retained.

Planning of Nursing Care Question 16

"Do the goals include a time element ?"

There were no comments. The mean of 4.18 (rank 40.5) and standard deviation of 0.9 (rank 30) suggested that although not considered very important, the item should be retained.

Planning of Nursing Care Question 17

"Are the goals arranged in order of priority ?"

Two comments indicated that the problems rather than the goals should be in priority order. The low mean of 3.91 (rank 49.5) necessitated rejection of this item.

Planning of Nursing Care Question 18

"Are planned nursing actions incorporated into the care plan ?"

This item had a high mean score of 4.62 (rank 17) and was retained.

Planning of Nursing Care Question 19

"Are planned nursing actions agreed upon with the patient and/or his family ?"

This was close to the borderline for rejection with a mean of 4.06 (rank 46) and standard deviation of 0.89 (rank 29) but was retained. Five experts commented that this was done if appropriate or possible.

Planning of Nursing Care Question 20

"Are planned nursing actions written very precisely and in detail ?"

Four experts questioned the meaning of precisely and in detail. However, the item was rated as fairly important with a mean of 4.57 (rank 20) and was therefore retained.

Seven out of 20 items were discarded from the Planning of Nursing Care Section and four were slightly reworded.

Implementation of Nursing Care Question 1

"Is a system of patient allocation used throughout the ward ?"

This item was rated as fairly important with a mean of 4.47 (rank 25) although there was some diversity of opinion with a high standard deviation of 1.27 (rank 53). One expert pointed out that although patient allocation is one form of ward organisation which aids in the implementation of nursing process, other organisational strategies such as primary nursing may be equally desirable. This is a valid criticism, although primary nursing is very rarely used in Britain. Primary nursing may be regarded as an extension of patient allocation, with a patient allocated to the same nurse throughout his/her hospital admission. Therefore the item was retained unchanged.

Implementation of Nursing Care Question 2

"Is the verbal handover (ward report) based on the care plans ?"

There were no comments about this item which had a very high mean and very low standard deviation. It was retained.

Implementation of Nursing Care Question 3

"Are the written nursing progress reports based on patient problems and goals ?"

Out of all the items this had the fourth highest mean and fifth lowest standard deviation and was therefore retained.

Implementation of Nursing Care Question 4

"Do all ward nursing staff use the care plans as a basis for giving care ?"

This was also given a very high mean (rank 7) and a low standard deviation (rank 10). One expert commented that it would be difficult to answer this question with certainty. The item was retained, but reworded as "Do both day and night nursing staff...", as suggested by two members of the panel.

Implementation of Nursing Care Question 5

"Is the patient and/or his family always given an explanation of the care he is receiving ?"

There was much disagreement about this with a standard deviation of 1.21 (rank 50) and a modest mean of 4.24 (rank 35). One expert commented that this should take place in any good ward, irrespective of whether or not NP is used. Another expert commented that this was not always beneficial for the patient. The item was discarded.

Implementation of Nursing Care Question 6

"Do nurses utilise appropriate nursing research findings in giving care ?"

Two experts pointed out that this should not only apply to wards using NP and although important for high quality care, was not a defining characteristic of NP. This view was reflected in the very low mean and very high standard deviation (ranks 59 and 63 respectively). The item was discarded.

Implementation of Nursing Care Question 7

"Do the nurses see the restoration of independence as being the ultimate aim of nursing care ?"

This item had the highest standard deviation (rank 65) and one of the lowest means (rank 57). 18 experts commented critically on this item, indicating that it was not always possible or appropriate to restore independence, that independence might be an aim, but not the ultimate aim of care, and that this was irrelevant to the use of NP. This item was discarded.

Implementation of Nursing Care Question 8

"Is it considered an essential part of nursing care to teach the patient and or his family, self-care ?"

There was little consensus about this item which had a very high standard deviation (rank 61) and a low mean of 3.91 (rank 49.5). Nine experts commented on this mostly suggesting that it was desirable in certain circumstances, but not related to the NP. The item was discarded.

Out of the original eight items in the Implementation of Nursing Care section four were discarded, three were retained unchanged and one was reworded. Three additional items were added to this section and are discussed later.

Evaluation of Nursing Care Question 1

"Is systematic evaluation of care considered essential for all patients ?"

There were no critical comments and the item had a high mean of 4.63 (rank 16). It was therefore retained.

Evaluation of Nursing Care Question 2

"Is evaluation recorded on either the care plan or the progress notes ?"

There were no comments about this and it had a very high mean of 4.76 (rank 10) and low standard deviation of 0.5 (rank 12.5). It was retained.

Evaluation of Nursing Care Question 3

"Is a date for the evaluation of any nursing action included in the care plan ?"

This item had a moderately high mean and moderately low standard deviation and no critical comments. It was retained.

Evaluation of Nursing Care Question 4

"Is the patient's progress towards the goals evaluated both objectively and subjectively ?"

This item had a moderately high mean and moderately low standard deviation (ranks 29 and 20 respectively). Four members of the panel commented on the desirability but difficulties of objective evaluation. One expert suggested that subjective evaluation was undesirable. However, given the well recognised problems with objective evaluation, it was decided that any systematic evaluation, whether subjective or objective, was a valuable component of the NP. The item was retained without alteration.

Evaluation of Nursing Care Question 5

"Are the patient and/or his family included in the evaluation ?"

Seven experts commented that this was done where possible and appropriate, but had to be decided on an individual basis. The mean of 4.12 (rank 44) was close to the borderline for rejection, but the standard deviation was moderately low at 0.7 (rank 22). The item was retained.

Evaluation of Nursing Care Question 6

"Are the care plans and nursing actions modified according to the results of the evaluation ?"

This was rated as one of the most important items with a very high mean and very low standard deviation. There were no comments and it was retained.

Evaluation of Nursing Care Question 7

"Is any attempt being made to develop objective outcome criteria against which care can be evaluated ?"

Seven experts commented critically on this. Some did not understand it; others commented that although the existence of objective outcome criteria was important, their development was a task for researchers rather than clinicians. These criticisms were reflected in the poor scores and the item was rejected.

Evaluation of Nursing Care Question 8

"Are self-evaluation or peer-evaluation used by the ward nurses to assess their own performance ?"

This achieved ranks of 64 for both mean and standard deviation and comments suggested that although desirable this was not part of the NP. The item was discarded.

Out of eight questions in the Evaluation of Nursing Care section, six were retained unchanged and two were discarded.

10.3.4.4 The experts' general comments about the scale.

In this section general comments about the whole scale are considered, including comments made by subjects who declined to participate in the validation exercise.

The first group of comments consisted of general notes about using NP in hospital wards, which were written by three subjects. As these were not directly relevant to the research, they will not be reproduced.

The second category of comments were criticisms of this study. Three subjects criticised the wording of questions with comments such as :
 "Most of your items are open to so many interpretations - another reflection of the complexity and ambiguity of the whole NP concept, for example... what is patient allocation ?" (Letter from non-responder); and "I had difficulty with a number of your questions ".

Four subjects commented that it would be difficult to get accurate information about actual ward practices. These comments included the following:

"literature... demonstrates often vast discrepancies between what they way they do and what they actually do... how likely this is where the issue in question is... sensitive" (Letter from non-responder).

"doubts that your questions are sufficiently penetrating to evoke true responses";

"Respondents may feel that their knowledge of nursing process is being tested and this may cause response bias"

"If I was an 'ordinary sister', I might feel a bit threatened by it all"

One subject suggested that a quality scale within each question would make them more discriminating. Another criticised the scale as not applicable to the whole spectrum of patients, such as the mentally handicapped.

These comments have been reproduced quite fully because they confirmed many of the researcher's concerns about the scale. They were therefore useful in planning the design of the next stage of testing the scale, and in the rewording of some of the items.

The third and final group of comments concerned general difficulties of research in this area and were thus only indirectly critical of this study. These comments were less useful, because each reflected the opinion of only one subject.

One subject questioned the assumption that NP was beneficial to patients and suggested that "before trying to quantify practice of nursing process, we need to know far more about... whether or not, and under what circumstances, it is demonstrably better for patients than... task-based nursing", (Letter from non-responder). However, it can equally be argued that quantification of NP is an essential prerequisite for evaluating the effectiveness of this method of care.

Another non-responding subject argued that quantitative research was "totally inappropriate" and that "qualitative descriptions of use in NP in clinical areas, however inadequate, would provide more information as to the extent of internalisation of the goals of NP than a quantitative scale". This argument was not directed by the subject specifically towards this study, but reflected the subject's general views about the limitations of quantitative research and her preference for qualitative methods. That particular debate is beyond the scope of this thesis.

Finally one subject noted that testing the scale would be very difficult because of the "problems of finding wards doing NP really well to test the scale". This subsequently proved to be correct, although the researcher had not anticipated that problem at this stage.

10.3.4.5 The experts' comments about additional items to be added to the scale.

A total of 24 additional items were suggested by twelve members of the panel, which suggested a diversity of opinions. The proposed additional items are listed at Appendix Part 3 Number 6. Seven items were rejected because they were :

- similar to items already included in the scale (4 and 16);
- similar to items already rejected by the panel (11);

- worded inappropriately i.e. affirmative response antithetical to the use of NP (5 and 8); or
- worded ambiguously (12 and 22)

The remaining 17 proposed items were content analysed to search for consistent themes. The following themes emerged :

| Theme | Item number | Number of subjects who mentioned this theme |
|---------------------------------------------------------------------|-------------------------------------|---------------------------------------------|
| Nurse has contact with his/her patients doctor(s) | 2, 9 | 2 |
| Content of the nursing assessment | 6 | 1 |
| Accountability and responsibility of the nurse for his/her patients | 1, 3, 13 | 2 |
| Continuity of care over time | 7, 17, 23 | 3 |
| Stated philosophy of care | 10 | 1 |
| Seniority of nurses | 14, 15 | 1 |
| Involvement of other professionals | 18, 19, 24 | 2 |
| Involvement of community staff | 20, 21 | 1 |
| Total number of separate themes = 8 | Total number of items analysed = 17 | |

Table 10.5

Results of content analysis of additional items suggested by members of the panel of experts for inclusion in the nursing process scale

It was decided that only themes independently suggested by at least two members of the panel would be considered for inclusion in the scale. These were :

1. Nurse has contact with his/her patients' doctor(s). Items 2 and 9;
2. Accountability and responsibility of the nurse for his/her patients. Items 1, 3 and 13.
3. Continuity of care over time. Items 7, 17 and 23; and
4. Involvement of other professionals. Items 18, 19 and 24.

The above themes and items were discussed with the two research supervisors and with a post-graduate nursing research student. It was decided to include one question on each of the first three themes, but not

on the fourth theme. During the initial validation of the scale, the panel indicated that support from medical staff and nursing administrators was not essential to the successful use of NP. Assuming this view to be applicable to other health professionals, it was decided not to add a question on the involvement of other health professions. Thus the following items were added to the scale, in the implementation of nursing care section:

Additional items

- Is a nurse allocated to the same patient, or group of patients, for several days ?
- Is each nurse responsible for the written progress reports and verbal handover for her patient or group of patients ?
- Do nurses take part in the medical rounds for their particular patients ?

10.4 THE REVISED SCALE

As a result of the validation exercise carried out by the panel of 37 NP experts, the scale was substantially altered. A copy of the revised scale is at Appendix Part 3 Number 7. Out of 65 original items, 25 were discarded, leaving 40 items, 12 of which were reworded. Three new items were added giving a total of 43 in the revised scale. In the original scale items were separately numbered within each section. In the revised version, this was changed to continuous numbering throughout the scale, making identifications of items easier. The heading nursing diagnosis was removed and the items in that section were incorporated into the nursing assessment section.

Table 10.6 Number and percentage of items in each section of the original and revised nursing process scales

| Section | Items in original scale | | Items in revised scale | |
|--------------------------------|-------------------------|-------------|------------------------|-------------|
| | Number | Percentage | Number | Percentage |
| General points | 12 | 18.5 | 4 | 9.3 |
| Nursing assessment | 10)) 17 |)) 26.1 | 13)) 13 |)) 30.2 |
| Nursing diagnosis | 7) |) | -) |) |
| Planning of nursing care | 20 | 30.8 | 13 | 30.2 |
| Implementation of nursing care | 8 | 12.3 | 7 | 16.3 |
| Evaluation of nursing care | 8 | 12.3 | 6 | 14 |
| Totals | 65 | 100% | 43 | 100% |

Table 10.6 shows that the percentage of items in the general points section of the revised scale is much less than in the original scale. This is a beneficial change as general points is not a recognised sub-category of NP, but simply preparatory work or unclassified items. The nursing assessment and planning sections contain a similar proportion of items in the original and revised scales. The implementation and evaluation sections have a slightly higher percentage of items in the revised scale. Thus the numerical balance among the four main sections in the revised scale is slightly improved, although the implementation and evaluation sections still have far fewer items than the assessment and planning sections.

To conclude, 43 items generally agreed to be important to the use of NP were identified. Two important questions remained: firstly, how best to obtain the information from wards; and secondly, how valid and reliable is the scale. These two questions are considered in the next chapter.

PART 3. CHAPTER 11

TESTING THE SCALE : METHODS

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PART 3. CHAPTER 11.

TESTING THE SCALE : METHODS

11.1 INTRODUCTION

A study was designed to rest and refine the NP scale. Its aims were to explore methods of collecting data about the use of NP in hospital wards and to test the validity, reliability and sensitivity of the scales. As the study was exploratory no specific hypotheses were formulated. Pre-pilot work consisted of discussions about the use of NP with various grades of nurses in several hospitals and non-participant unstructured observation of NP in action in several hospitals and types of wards.

11.1.1 Methods of obtaining information about NP used in early testing

The pilot study of the questionnaire survey (see Section 6.7) and other preliminary testing asked sisters to respond yes or no to each item in the NP scale. It became apparent however, that sisters wanted their wards to be favourably judged and some obviously inflated scores were obtained. The sisters who appeared to be most innovative and knowledgeable tended to be self-critical and produced low scores. Some sisters who were reluctant to change from task-oriented care seemed threatened by the exercise and produced higher scores than seemed justified.

To overcome this problem, data were collected from three qualified nurses, including the sister during the main study. SN's and SEN's seemed well able to describe ward practices and appeared not to need to present the ward favourably. Discrepancies among the three nurses rarely occurred on more than four or five out of 40 items. Respondents may have tried to be more accurate knowing that other nurses were answering the same questions. In the main study the response categories were extended from yes/no to yes/to some extent/no.

The scale was used as a structured interview schedule in both exercises described above, to check subjects' understanding of the questions. Very few subjects required explanation of the items or appeared to misunderstand. Therefore the items could readily be used in a self-completion scale format.

The scale discriminated well among wards in the direction predicted on the basis of the researcher's unstructured observations and information obtained from nurse managers.

11.1.2 Study design

The design required one hospital, not previously involved in the study. Data would be collected in eight medical and surgical wards arranged as

four matched pairs with NP in use in one half, but not in the other.

All eligible nurses on duty during two consecutive days would complete the NP scale and add comments if desired. Over the same period two researchers would independently complete ward observation/information schedules. Two NO's would complete scales about the use of NP in the wards. These data would be used to identify accurate methods for collecting information and would indicate the reliability and validity of the scales. Test-retest reliability would be examined by small follow-up studies two months and 18 months after the original data collection period.

11.1.3 Description of instruments prior to pilot testing

11.1.3.1 Self-completion nursing process scale

This four page questionnaire consisted of the 43 items resulting from the initial validation of the scale by the panel of NP experts. Details of the layout, instructions to respondents and additional questions are shown in the example of the questionnaire at Appendix Part 3 Number 8.

As the scale had not been completed by unqualified nurses it was pretested on a convenience sample of six final year undergraduate student nurses in October 1981, who answered the questions in relation to their most recent ward placement. All understood the questions and completed the form without difficulty in less than 15 minutes. Two subjects commented that nurses without knowledge of NP concepts might find the scale difficult. Three subjects thought the scale was rather long and concentration might be lost. All found the directions and explanation satisfactory.

11.1.3.2 Ward information sheet

This form was also used in the questionnaire survey and is described at Section 6.6.1 (Appendix Part 2 Number 11).

11.1.3.3 Nursing officers' ward rating scale

Preliminary discussions with NO's suggested that they were generally aware of the extent of NP implementation in their wards, although their knowledge was not sufficiently detailed to enable them to respond to all 43 items on the NP scale. A ward rating scale for NO's was therefore designed which asked them to rate the use of NP in a particular ward in terms of general points, assessment, planning, implementation and evaluation on a five point scale. The form included explanations about terms used, instructions for completion, and an assurance of confidentiality. Subjects were asked about the amount of contact with the ward and invited to add general comments. (Appendix Part 3 Number 9).

11.1.3.4 Ward observation/information schedule

Observation/information-gathering by a non-participant observer is another method of obtaining data about the use of NP in wards. Unstructured non-participant observation was used in the questionnaire survey mainly as an additional check on nurses' ratings of NP use in their wards. In this study a systematic observation/information gathering tool was designed, the results of which could be compared with nurses' self-ratings. It was based on the same 43 items as the self-completion scale and could produce the same cumulative scores and sub-scores.

The schedule was designed for use over two consecutive midweek days, a late shift, followed by an early shift. The first task was to define a focus for observation/information gathering and eleven categories were identified as ways in which information relevant to the 43 items in the scale could be identified.

Figure 11.1

Categories for observation/information-gathering about the use of NP in wards

- | |
|------------------------------------------------------------------------------------------------------------|
| A. Information from NO for the ward |
| B. Information from school of nursing or in-service training department |
| C. Observation of three handover reports - morning, lunchtime and evening |
| D. Focussed conversation with five randomly selected patients |
| E. Observation of admission of one patient |
| F. Inspection of randomly selected care plans, Kardex and other nursing documentation for five patients |
| G. Observation of two medical rounds - one consultant's round and one houseman/registrar's round |
| H. Focussed conversation with night nurses |
| I. Observation of evaluation sessions with/for one patient (if this takes place) |
| J. General observation of four nurses - a sister, a qualified nurse, a senior learner and a junior learner |
| K. Focussed conversation with three visiting relatives |

The categories were selected in collaboration with the research supervisor and advisers. Although some details, such as the number of patients, relatives, medical rounds etc. were chosen arbitrarily, they were thought to be appropriate and feasible.

The next task was to decide which of the 43 NP items could be examined within each of the eleven categories. Some categories could provide information about many NP items (e.g. inspection of NP documentation gives

information about 29 items) whereas others could provide information about only a few items (e.g's. observation of medical rounds, discussion with night nurses). Some NP items could be examined within just one category, whereas others could be examined within up to four categories.

Appendix Part 3 Number 10 shows that the front page included instructions to observers, who were to complete as many items as possible over two days. At the end of the observation period they were to work through a copy of the NP measuring scale item-by-item, using the key to observation/information categories for each NP question on page 6 of the schedule. They were to refer to the relevant category or categories on the schedule to obtain an overall score for each item. When information about the item had been obtained in two or more categories, the modal response (or if necessary the median or mean response) was to be used as the score for that item,

11.1.4 The Hospital

The study was carried out at Hospital 3 (H3), described in Section 5.3.3. It was necessary to use a different hospital for validity and reliability testing of the NP scale from the hospitals used in the survey of patient and family participation. Staff in H1 and H2 were already familiar with the research, having been fully informed after the survey and H1 and H2 had also been involved in early development and testing of the NP scale. Their previous exposure to the research could have biased the results of any further related study. H4 could not be used because it was too specialised to represent a typical general hospital environment.

H3 was selected because there were enough matched pairs of NP and non-NP wards. The nurse managers were interested in the study and were keen to evaluate the extent of implementation of NP. Another reason was that the undergraduate nursing student who was the research assistant for this phase of the research had worked there and knew H3 well.

11.1.5 The researchers

During this study the researcher received assistance with data collection from a final year undergraduate nursing student who wished to carry out a project on NP. A graduate ward sister at H3 was briefly seconded to help with the 18 month follow-up.

11.2 THE PILOT STUDY

This was a small scale trial of all aspects of the research design on one ward and an opportunity to test the feasibility and suitability of the methods, including the instruments. Permission to collect data was obtained from the NO and ward sister.

11.2.1 Procedure

The pilot study was carried out in one mixed sex orthopaedic ward, which was selected because it could not readily be matched with any other ward, according to the NO for the NP, and was therefore unsuitable for inclusion in the main study.

Data were collected in November 1981, over two consecutive days, a late shift followed by an early shift. Six nurses completed the NP scales: sister, SN and four learners. Four nurses completed the scale in a group and two completed it individually in their own time. The two researchers independently completed the observation/information-gathering schedules and information was obtained from the Unit NO and the NO for the NP.

11.2.2 Results and discussion

Each item on the NP scale was scored from 0 to 3 giving a possible range of scores from 0 to 129. The six nurses scored as follows:

| | | |
|-----|---|------------------|
| 107 | } | - learner nurses |
| 106 | | |
| 84 | | |
| 80 | | |
| 105 | . | - SN |
| 108 | - | sister |

The mean score was 98.3 and standard deviation 12.7. It can be seen that the sister obtained the highest score which accords with earlier findings, but there were no major differences among subjects according to grade.

Scores for the observation/information schedule were lower than the nurses' self-ratings at:

| | |
|----|----------------------|
| 79 | - researcher |
| 75 | - research assistant |

This indicates a very high inter-rater reliability after just half an hour's training in the use of the observation/information schedule. Although lower than the nurses' self-ratings, the researchers' scores are very close to the two lowest nurses' scores of 80 and 84.

NOS' scores had a possible range from 5 to 25 and the following scores were obtained:

| | |
|----|-----------------|
| 20 | - Unit NO |
| 17 | - NO for the NP |

These were close enough to indicate high inter-rater reliability between the two NOS.

Nurses' reactions to the study were friendly, helpful and interested. The design was practically feasible and produced meaningful results. Forms were completed without difficulty. The only changes made to the design were:

- to define more clearly the criteria for inclusion of ward nurses in the study (see main study);
- to standardize the instructions to subjects for completion of the self-rating scale (see main study); and
- to administer the scales to nurses in supervised groups, to ensure independent responses and maximize the response rate.

11.3 MAIN STUDY

11.3.1 Administration

Permission to conduct the study was obtained from the District Nursing Officer, Divisional Nursing Officer and Director of Nursing Education. The research proposal was approved by the District Ethics Committee without alteration.

Informal meetings were held with the NO for the NP, the tutor responsible for post-basic education on the NP and the Unit NO's for each ward.

The study was planned and executed in accordance with the guidelines concerning ethics in nursing research prepared by the Rcn (1977) (see Section 7.1.2 for discussion of the ethical principles relevant to this part of the study).

Eight general medical and surgical wards were selected in collaboration with the NO for the NP, on the basis of her ratings of the use of NP. The wards were matched as far as possible, except that NP was used in one half, but not in the other.

Ward sisters were visited before the study to obtain their consent. The methods were briefly explained and they were given a short written explanation prepared by the research assistant (see Appendix Part 3 Number 11). Data collection was usually arranged for days when sister was on duty.

On completion of data collection letters of thanks were sent to senior nurses and ward sisters (see Appendix Part 3 Number 12).

11.3.2 Research instruments

Development and pilot testing of instruments was described in Sections 11.1.3 and subsections and 11.2 and subsections. No changes were made to the scales after pilot testing. In summary, the following instruments were used:

- self-completion NP scale (see Section 11.1.3.1 and Appendix Part 3 Number 8);
- ward information sheet (see Section 6.6.1 and Appendix Part 2 Number 11);

- NO's ward rating scale (see Section 11.1.3.3 and Appendix Part 3 Number 9); and
- ward observation/information schedule (see Section 11.1.3.4 and Appendix Part 3 Number 10).

To satisfy her project requirements the research assistant developed a short questionnaire to collect nurses' opinions on how they felt NP had affected their work. The study is not described here, but is fully documented as an undergraduate dissertation of Chelsea College (Tutton, 1982).

11.3.3 Subjects and sampling

The design specified that all nurses on duty during the two days of data collection would be asked to complete the NP scale.

Following the pilot study, criteria for inclusion of ward nurses in the study were specified, so that subjects:

- must be qualified nurses or learner nurses;
- must not be auxiliaries, clinical teachers or first ward learners;
- must have worked on the ward for at least seven days; and
- must be working on day duty.

11.3.4. Procedure

Data were collected between December 1981 and February 1982. The procedure was identical on each ward. The two researchers worked as non-participant observers for two shifts, a late shift followed by an early shift the next day. The researchers wore white coats and name badges, to distinguish them from the nursing team. At the beginning of data collection on each ward, the researchers joined the lunchtime nursing report and introduced themselves to the nurses.

11.3.4.1 Completion of observation/information schedules and other instruments

The ward observation/information schedules were independently completed by each researcher over two days. To minimize inconvenience to other staff, only the main researcher obtained information from the NO for the ward and from the school of nursing. At the end of the second day each researcher independently calculated a total NP score for the ward.

NOs' ward rating scales were administered by the main researcher to the Unit NO and the NO for the NP. The ward information sheet was similarly completed by the main researcher only, to minimize disruption to the ward. Summary ward profiles were developed from the ward information sheets and information supplied by the NO's and sisters.

Figure 11.2. Summary profiles of the wards at H3 used in the nursing process study

Note : All the wards had some features in common; male and female patients; 22 to 26 beds; and a layout consisting of six or four bedded bays and single rooms.

| Ward no. | type of ward | pattern of staffing | level of activity | use of NP, as predicted by NO's and sisters | organisation of nursing, observed by researchers | general comments |
|----------|----------------------------------------|---------------------|--------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1 | surgical - arterial | fair | moderately busy | good, but no goal setting or evaluation | learners - patient allocation for one day; qualified nurses - float | friendly |
| 2 | medical - respiratory | adequate | many dependent patients and long-term geriatrics | very good | patient allocation by area for seven days | sister has been clinical teacher, manager and researcher. She is knowledgeable and enthusiastic |
| 3 | surgical - general and bowel | adequate | busy with critically ill patients | not officially being used | learners - patient allocation for one day | sister seemed reluctant to take part in study |
| 4 | medical - general and renal | very short-staffed | demanding illnesses | not in use except nursing history forms | team nursing in pairs | hierarchical practices |
| 5 | surgical - oncology and breast disease | adequate | busy | sister and SN dislike it | task allocation | sister not on duty during data collection |
| 6 | surgical - orthopaedic | good | busy but calm | good | patient allocation | seems friendly and efficient |
| 7 | medical - general | adequate | fairly busy | very good | patient allocation | graduate sister - knowledgeable, enthusiastic and friendly with nurses |
| 8 | medical - rheumatology | adequate | many dependent patients | poor | task allocation | hierarchical with sister maintaining most responsibility |

11.3.4.2 Completion of NP scales by ward nurses

To permit the use of a standardised procedure and reduce disruption to the ward, nurses were tested in groups. Convenient times for testing were negotiated with the sister and usually took place immediately after the lunchtime report on both days. The nurse in charge was often too busy to join a group session and typically completed forms alone at a convenient time during the shift. All questionnaires were returned on the day of issue. The response rate was 100% as all eligible nurses agreed to participate. 68 nurses completed forms, an average of 8.5 per ward. On one ward recent staff changes resulted in there being only three eligible nurses. Therefore the ward was revisited three weeks later when five more subjects were tested.

The procedure for group testing was identical on each ward. Potential subjects were asked individually whether they were willing to spend ten to twenty minutes filling in questionnaires about the use of NP in the ward. They were told that there was no obligation to take part. Subjects were taken to a quiet comfortable room where half the sessions were carried out by each researcher using a standardised procedure, so that scorer reliability could be estimated.

The researcher introduced herself and explained that the study involved the organisation of care and examined whether NP was being used and if so to what extent. Subjects were given pencils, clipboard and questionnaires and were asked to read the written instructions. They were reminded that there were no right or wrong answers and that their responses would not be seen by anyone at the hospital. They were invited to ask questions before they began.

The researcher remained in the room while the forms were completed. Before individuals left, their forms were checked for accidental omissions, so that these could be immediately rectified.

11.3.5 Test-retest reliability

Some subjects were asked to complete the self-rating NP form a second time two months after the original administration. The names of all qualified nurses who completed questionnaires in December 1981 were affixed to their forms. At the end of February 1982, eleven of those nurses still worked in the same ward and were asked to complete questionnaires again. It was emphasized that this was to test the scale, not test their memories. Of the eleven nurses approached, eight completed scales, one agreed but never returned the form and two refused because they were too busy. This was a response rate of 73%. Learner nurses were excluded because of the

frequency with which they change wards. On completion of the exercise, subjects' names were discarded, to preserve anonymity.

11.4 TREATMENT OF RESULTS

Qualitative data consisted of nurses' comments written on the self-completion scale and researchers' general observations. These were described and content analysed (see Section 7.3.7).

Quantitative data consisted of findings from the NP measuring scale as used in the nurses' self-report scale and the observation/information schedule; and data from NOs' ward ratings. These produced ordinal level data (see Section 7.3.2.1). As the distance between categories was not fixed or equal and there was no inherently fixed zero point, interval level measurement was not achieved. Non-parametric tests were therefore used for most of the analysis (see Section 7.3.2.5).

Data were analysed manually using 2-tailed tests. The 5% ($p < .05$) probability level was regarded as the minimum acceptable level for statistical significance. Correlational techniques were used in the reliability and validity analysis. The Spearman rank correlation coefficient (r_s) is a non-parametric measure of association between two variables measured at least at ordinal level so that scores can be ranked in two ordered series. It is equivalent to the Pearson r , but has a lower power efficiency (91%) (Siegel, 1956). The Pearson product moment correlation coefficient (r) is a parametric test described at Section 7.3.4.3. It was used only when there were too many subjects for the Spearman r_s . The chi squared (χ^2) test for $N \times 1$ matrices (described at Section 7.3.4.1) was used to examine differences among nurses in the same ward.

The Wilcoxon rank sum test is equivalent to the Mann Whitney U test (Coyle, 1982). It tests whether two independent groups are drawn from the same population. It was used to examine differences between data collected from nurses by each researcher.

PART 3. CHAPTER 12.

TESTING THE SCALE : RESULTS

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PART 3. CHAPTER 12.

TESTING THE SCALE : RESULTS

In this chapter the results of scale testing are presented. The first part of the chapter consists of an exploration of methods of using the scale: specifically, as an observation/information-gathering schedule; as a self-completion scale for nurses; and as an NOs' ward rating scale. Validity and reliability data are presented and summarised in the second part of the chapter, which also includes consideration of the sensitivity of the scale.

12.1 EXPLORATION OF METHODS OF USING THE SCALE

12.1.1 Observation/information schedule

12.1.1.1 The main sections of the schedule

Schedules were completed by both researchers without difficulty and the instructions were found to be unambiguous. Both researchers found that the four point response scale (yes, to some extent, no, don't know) was insufficiently discriminating to identify small differences between wards or over time.

A. Information from nursing officer for the ward

Nos were willing and able to respond to the questions without difficulty, although some of their answers conflicted with information provided by ward nurses. It seemed that Nos were too remote from wards to know whether all permanent staff had attended teaching on NP.

B. Information from school of nursing/in-service training department

Nurse educators were willing to respond to questions. The accuracy of their replies was uncertain as they had little direct contact with the wards.

C. Observation of three handover reports - morning, lunchtime and evening.

Reports took place on all wards at the times expected. There were no objections to the researchers' presence and it was easy to take notes as most nurses at report did so. Lunchtime report was the longest and the only one at which all nurses reported on their own patients. Only one ward allowed all nurses to attend evening report; usually it was given by the nurse-in-charge to the night nurses. Some wards encouraged nurses to base verbal reports on care plans, but most used the Kardex. Typically report consisted of each patient's name, age, bed number, medical diagnosis, treatments and/or surgery and medical condition. Care given that morning was described, mentioning any tasks that remained for the afternoon. The

most frequently mentioned aspects of care were hygiene, diet and mobility. Very rarely were patients' problems, goals or evaluation mentioned at report, even in wards using nursing process. On several wards auxiliaries were allocated to patients and were expected to give written and verbal reports.

D. Focussed conversation with five randomly selected patients

It was impossible to select patients randomly as many were too ill, tired, senile or otherwise occupied. Both researchers tended to approach alert, cheerful-looking patients who were out of bed. This may have been an atypical sample. Many patients did not know who their allocated nurse was, even on wards using patient allocation over several days. Many patients understood the goals of their medical and physiotherapy treatment, but were unaware of nursing goals. Many patients were critical of communication, claiming they were "made to feel not like a person, more an object".

E. Observation of admission of one patient

Some wards had several admissions during the observation period, but others had none. It became apparent that, irrespective of ward policy, each nurse's admission technique and interview skills were different. Ideally, two or three admissions should be observed, bearing in mind that initial patient assessment could occur several hours after admission. The researchers became aware that their presence could alter the nurse-patient interaction and that they could trespass on patients' privacy at a time of stress.

F. Inspection of randomly selected care plans, Kardex and other nursing documentation for five patients

This was an easy task which yielded valuable data. Several systems of nursing documentation were in use, resulting in considerable duplication of records and complaints by nurses. NP documentation had been introduced in most wards (assessment forms and care plans), but the original Kardex was still used. Some wards kept nursing orders at the end of patients' beds, the information in which also appeared in the daily report form. Some wards also had problem statement sheets, which duplicated the nursing orders. (Examples of the various forms are at Appendix Part 3 Number 13).

Forms were often incomplete or incorrectly used. Some so-called care plans consisted of lists of tasks with no reference to problems or goals. Some care plans were updated infrequently or were written after care had been given. Many senior nurses said they did not ever look at care plans, except to update them; however many junior nurses claimed they were useful. There seemed to be little connection between the paperwork and the actual

approach to care. None of the wards recorded any form of evaluation and goals were rarely worded as patient outcomes.

G. Observation of two medical rounds, one consultant and one registrar or houseman

Not all wards had a consultant's round during the two observation days, but there was no difficulty in observing junior doctors' rounds. On many occasions doctors did not walk from patient to patient but received a report on each patient from the nurse-in-charge at the ward desk. Doctors were generally unaware of which nurses were looking after which patients, as there was no mechanism to inform them. Trainee nurses were rarely seen to discuss their patients with doctors; their observations were reported to the doctor via the nurse-in-charge.

H. Focussed conversation with night nurses

There was no difficulty in obtaining information from night nurses.

I. Observation of evaluation session with one patient

No formal or informal evaluation sessions took place on the wards. It seems likely that information about patient evaluation can more readily be obtained from categories C, D, F, J and K.

J. General observation of four nurses - sister, qualified nurse, senior and junior learners

The schedule did not specify the length of observation periods, nor what was to be observed, so each observer interpreted this differently. There were not always nurses in each category on duty during the two days observation. Both subjects and observers felt uncomfortable about this, especially as explicit consent was not sought. Relevant information was obtained from nurses in the four categories during informal interviews, such as talking at meal and coffee breaks.

K. Focussed conversation with two visiting relatives

Relatives could not be randomly selected as many were too busy, deaf, or distressed to talk. Although questions were re-worded to make them more comprehensible, some relatives had difficulty understanding them. This was exemplified by a relative who said "I'm very happy with everything... no complaints at all, thank you". In some cases lack of relative involvement was entirely appropriate, as the patient neither wanted nor needed his or her relative's assistance.

12.1.1.2 Data from observation/information schedules

Table 12.1 - See overleaf (p. 353)

Table 12.1

Observers' total scores for each ward, showing ranking of wards
(1 is high, 8 is low)

| Ward | Main researcher | Research assistant | Mean of observers' ratings |
|--------------|-----------------|--------------------|----------------------------|
| | (ranks) | (ranks) | (ranks) |
| 1 | 68 (4) | 76 (4) | 72 (4) |
| 2 | 109 (1) | 108 (1) | 108.5 (1) |
| 3 | 60 (5) | 67 (6.5) | 63.5 (6) |
| 4 | 58 (6) | 61 (8) | 59.5 (7) |
| 5 | 51 (8) | 67 (6.5) | 59 (8) |
| 6 | 82 (3) | 79 (3) | 80.5 (3) |
| 7 | 102 (2) | 89 (2) | 95.5 (2) |
| 8 | 57 (7) | 71 (5) | 64 (5) |
| total scores | 587 | 618 | 602.5 |
| mean scores | 73.4 | 77.3 | 75.3 |

The Spearman r_s revealed a significant positive correlation between the two researchers (r_s 0.85 $p < .01$).

Inspection of data revealed that the research assistant obtained a slightly higher overall score, but was higher on only five of the eight wards, not consistently.

Table 12.1 also permits examination of the rank ordering of wards for mean observers' ratings of use of NP. This can be seen more clearly in Figure 12.1

Figure 12.1

Rank order of wards' use of nursing process as shown by mean observers' ratings

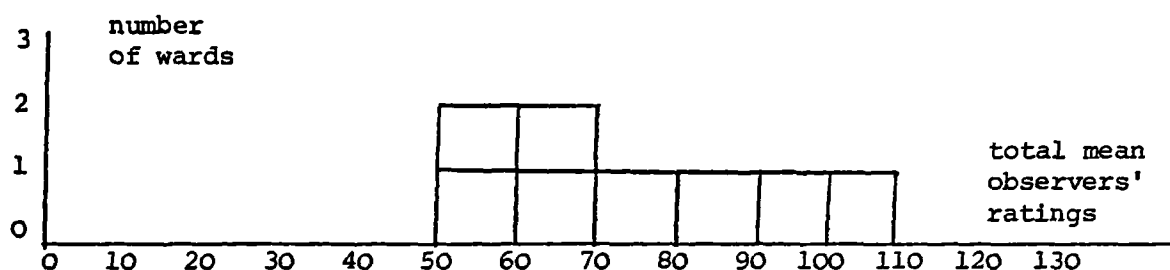
| use of nursing process | ward |
|------------------------|------|
| maximum | 2 |
| ↑ | 7 |
| | 6 |
| | 1 |
| | 8 |
| ↓ | 3 |
| | 4 |
| minimum | 5 |

This ranking accords closely to the rank order of wards, implied by NOs and sisters' predictions of NP use, shown in Figure 11.2. Statistical comparison is not possible, but inspection of Figures 11.2 and 12.1 reveal

a close concordance. Wards 2 and 7 have graduate sisters and were thought to be using NP very well. Wards 6 and 1 were described as using NP well. Wards 8, 3, 4 and 5 were considered not to be using NP and organised care using task allocation or team nursing at least some of the time.

Figure 12.2

Distribution of total mean observers' scores for each ward, blocked in multiples of 10.



$n = 8$ wards, possible range of scores 0 to 129 (i.e. $43 \times 0-3$), actual range 49.5 (59 to 108.5), mean 75.3, SD = 18.2

Data from Figure 12.2 indicate that the actual range of scores covered only 38.4% of the theoretically possible distribution and was skewed towards the top half of the distribution. However the distribution is misleading because a response of "no" is scored 1 and "don't know" is scored 0. Therefore negative answers to every question would still obtain a score of 43. If the theoretically possible distribution were assumed to be 43 to 129 instead of 0 to 129, then the data in Figure 12.2 would indicate that the range of scores covered 57.6% of the possible distribution. No wards scored in the top 23.8% or the bottom 18.6% of the possible distribution. With this modification it can be seen that the data are normally distributed.

Table 12.2

See overleaf (p. 355)

Table 12.2

Main researcher's total scores for each section of the schedule for each ward, also showing ranking (1 is high, 8 is low).

| Ward | general points | | nursing assessment | | planning | | implementation | | evaluation | |
|--------------|----------------|-----|--------------------|-------|----------|-------|----------------|-------|------------|-------|
| | (ranks) | | (ranks) | | (ranks) | | (ranks) | | (ranks) | |
| 1 | 10 | (3) | 22 | (4.5) | 15 | (5) | 14 | (3) | 8 | (3.5) |
| 2 | 10 | (3) | 33 | (2) | 33 | (1) | 19 | (1) | 14 | (1) |
| 3 | 9 | (6) | 20 | (6) | 14 | (7.5) | 11 | (5) | 6 | (6) |
| 4 | 7 | (8) | 22 | (4.5) | 15 | (5) | 8 | (6.5) | 6 | (6) |
| 5 | 9 | (6) | 16 | (8) | 14 | (7.5) | 7 | (8) | 5 | (8) |
| 6 | 9 | (6) | 31 | (3) | 21 | (3) | 13 | (4) | 8 | (3.5) |
| 7 | 11 | (1) | 37 | (1) | 30 | (2) | 15 | (2) | 9 | (2) |
| 8 | 10 | (3) | 18 | (7) | 15 | (5) | 8 | (6.5) | 6 | (6) |
| total scores | 75 | | 199 | | 157 | | 95 | | 62 | |
| mean scores | 9.4 | | 24.9 | | 19.6 | | 11.9 | | 7.8 | |

Table 12.3

Research assistant's total scores for each section of the schedule for each ward, also showing ranking (1 is high, 8 is low)

| Ward | general points | | nursing assessment | | planning | | implementation | | evaluation | |
|--------------|----------------|-------|--------------------|-------|----------|-------|----------------|-------|------------|-------|
| | (ranks) | | (ranks) | | (ranks) | | (ranks) | | (ranks) | |
| 1 | 10 | (4.5) | 25 | (3) | 20 | (5.5) | 13 | (4) | 8 | (2.5) |
| 2 | 10 | (4.5) | 34 | (1) | 36 | (1) | 16 | (1) | 12 | (1) |
| 3 | 9 | (7) | 24 | (4.5) | 18 | (7) | 10 | (5) | 6 | (7.5) |
| 4 | 8 | (8) | 22 | (7.5) | 17 | (8) | 8 | (7.5) | 6 | (7.5) |
| 5 | 10 | (4.5) | 22 | (7.5) | 20 | (5.5) | 8 | (7.5) | 7 | (5) |
| 6 | 10 | (4.5) | 24 | (4.5) | 24 | (2.5) | 14 | (2.5) | 7 | (5) |
| 7 | 11 | (1.5) | 32 | (2) | 24 | (2.5) | 14 | (2.5) | 8 | (2.5) |
| 8 | 11 | (1.5) | 23 | (6) | 21 | (4) | 9 | (6) | 7 | (5) |
| total scores | 79 | | 206 | | 180 | | 92 | | 61 | |
| mean scores | 9.9 | | 25.8 | | 22.5 | | 11.5 | | 7.6 | |

Tables 12.2 and 12.3 show that the research assistant obtained higher total scores than the main researcher on three sections (general points, nursing assessment and planning), but lower scores on the other two sections (implementation and evaluation).

Data in Tables 12.2 and 12.3 permit correlations between the two researchers for scores on each main section of the NP scale. Table 12.4 below shows that there were significant positive correlations on every section of the scale.

Table 12.4

Correlations between the two researchers for scores on each section of the observation/information-gathering schedule, using the Spearman r_s

| section of schedule | Spearman r_s | p |
|--------------------------------|----------------|-------|
| general points | 0.85 | < .01 |
| nursing assessment | 0.76 | < .05 |
| planning of nursing care | 0.82 | < .05 |
| implementation of nursing care | 0.87 | < .01 |
| evaluation of nursing care | 0.8 | < .05 |

12.1.2 Nurses' self-completion scale

Nurses were able to complete the scales without difficulty, but bias may have been introduced into the procedure and responses in several ways. It was difficult to arrange quiet group testing sessions as staff coffee rooms had to be used with inevitable interruptions. Although subjects were discouraged from discussing their answers while filling in forms, this could not be entirely prevented. Some nurses, particularly junior learners seemed reluctant to criticize the ward and produced unrealistically high scores. Whether this was due to loyalty, naivety or fear of recriminations is unclear. It also became obvious that junior learners, especially first years, did not fully understand NP concepts and terminology and could not therefore understand all the questions. Furthermore, first year learners had too little experience against which to compare and judge ward practices.

12.1.2.1 Comments written on the scale

At the end of the self-completion scale was printed "If you wish to make any comments on any part of this questionnaire please use the space below and overleaf".

Table 12.5

See overleaf (p. 357)

Table 12.5

Number of nurses of each grade in each ward who wrote comments on the scale

| Ward | Sisters | SN/SEN | Learners | Total |
|-------|---------|--------|----------|-------|
| 1 | 1 | 2 | 3 | 6 |
| 2 | 0 | 2 | 3 | 5 |
| 3 | 0 | 1 | 1 | 2 |
| 4 | 0 | 0 | 1 | 1 |
| 5 | 0 | 1 | 2 | 3 |
| 6 | 0 | 2 | 1 | 3 |
| 7 | 1 | 0 | 3 | 4 |
| 8 | 0 | 0 | 0 | 0 |
| total | 2 | 8 | 14 | 24 |

10

Table 12.5 shows that 24 out of 68 nurses (35%) chose to write comments, of whom a greater proportion were learners (41% of all learners) rather than qualified nurses (29% of all qualified nurses). Nurses on W1 and W2 wrote the most comments (6 and 5 respectively) and nurses on W4 and W8 wrote the least (1 and 0 respectively).

Four subjects commented about the scale. A SN/SEN on W1 thought it a "very good and well set out list of questions". Two nurses, both SNs/SENs on W2, commented on the shortness of the response scale. One wrote "the four categories are not adequate for many of the questions", to which the other added "'to some extent' could be from a very few times to nearly always". The sister on W7 suggested that the scale "might be used by sisters to assess their own level of implementation".

The remaining subjects' comments could be broadly divided into those concerning the advantages of NP and those concerning the difficulties. Tables 12.6 and 12.7 show the results of the content analysis, including classification with themes and typical examples. There were many more comments about the difficulties of NP (22 comments) than about the advantages (9 comments). Some subjects wrote lengthy comments which contained several themes and appear in two or more sections. There was only one clearly irrelevant comment (SN/SEN, W2) about the effects of the shortened working week.

Table 12.6

See overleaf (p. 358)

Table 12.6

Content analysis of nurses' comments concerning the advantages of nursing process

| THEME | TYPICAL EXAMPLE(S) | NUMBER, GRADE AND WARD OF NURSES |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| positive attitude expressed without explanation | "much preferred to the old system" | SN/SEN W1 |
| patient seen as a whole | "It is better now that nurses are looking at the patient as a whole... rather than task allocation" | 2 learners W1 and W2 |
| | "gives you the opportunity to care totally for your patient" | |
| increase in nurses' responsibility and accountability | "nurses are responsible for patients and can be asked specific questions" | SN/SEN W2 |
| closer nurse-patient relationship | "you get a more intimate contact with the patient... and can become more involved with him" "get to know them extremely well" | 3 learners W2 |
| stimulates thinking | "care plans get the nurse to think about the patient's problems" | learner W7 |
| deleterious effect of task allocations | "care is best in the mornings, but falls down in the afternoon, due to a lack of delegation" | learner W3 |
| total | | 9 comments |

TABLE 12.7. Content analysis of nurses' comments concerning the difficulties of nursing process

| THEME | TYPICAL EXAMPLE (S) | NUMBER, GRADE AND WARD OF NURSES |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <u>DOCUMENTATION</u> | | |
| - time consuming resulting in neglect of patients | "the patients are neglected somewhat for the paperwork" "care plans need to be updated constantly...takes a lot of time" "paperwork either tends to repeat itself or...is neglected altogether" | learner W7 2 SN/SENS W3 and W5 |
| - unsuitable | "list of physical problems means that psychiatric problems...not recorded and evaluated" | learner W5 |
| - not filled in properly | "care plans not filled in with sufficient detail. Reports are quick and rather sketchy" | learner W4 sister W7 |
| <u>STAFF FACTORS</u> | | |
| - junior nurses must be supervised or standards of care deteriorate, time consuming for senior nurses | "Junior nurses sometimes allocated high dependency patients which can be dangerous" "Trying to...supervise juniors is very difficult as often short-staffed" | 2 SN/SENS W2 SN/SEN W6 learner W1 |
| - quantity of staff as important as use of NP | "the care is good, but... mainly because of good staffing numbers" | 3 learners W1 learner W2 learner W7 |
| - quality of staff as important as use of NP | "staff are very patient oriented. There is a tremendous enthusiasm to maintain the high standards" | learner W7 |
| - difficult to sustain if staff not interested | "process is not working well due to lack of interest by trained staff" | learner W5 |
| - difficulty due to rapid staff turnover | "implementation...slow due to constant changing of the main work force i.e. students" | sister W7 |
| <u>MISCELLANEOUS</u> | | |
| - difficulty unspecified | "implementing individual care is proving to be a problem" | sister W1 |
| - total patient care can be a misnomer | "You do not always do the drugs of your patients. Also I don't feel involved in my patients' discharge planning at all" | learner W6 |
| - some patients unable to participate in care | "a few patients incapable of partaking (SIC) in their care plans, either because they are demented or not high IQ" | SN/SEN W6 learner W7 |
| Total | | 22 comments |

12.1.2.2 Data from nurses' self-completion scale

Sample characteristics of nurses

(percentages are rounded to the nearest whole number)

Table 12.8. Number of subjects in each ward

| Ward | Number | Percentage |
|-------|--------|------------|
| 1 | 10 | 15 |
| 2 | 10 | 15 |
| 3 | 8 | 12 |
| 4 | 8 | 12 |
| 5 | 8 | 12 |
| 6 | 9 | 13 |
| 7 | 8 | 12 |
| 8 | 7 | 10 |
| total | 68 | 101% |

Subjects were not evenly distributed across wards, but there were no major discrepancies in the number of subjects from each ward.

Table 12.9. Educational qualifications

| Qualification | Number | Percentage |
|-------------------------|--------|------------|
| none or no answer | 1 | 2 |
| less than 4 "O" levels | 6 | 9 |
| 4 or more "O" levels | 36 | 53 |
| diploma or 2 "A" levels | 22 | 32 |
| degree | 3 | 4 |
| total | 68 | 100% |

The distribution of educational qualifications among these nurses was similar to that found at H1 and H2 in the questionnaire survey (see Table 8.4)

Table 12.10. Professional and technical qualifications

| Qualification | Number | Percentage |
|-----------------------|--------|------------|
| none or no answer | 29 | 43 |
| technical (or SEN) | 12 | 17 |
| professional (or SRN) | 27 | 40 |
| total | 68 | 100% |

Five learner nurses had qualifications classified as technical. These included nannies, nursery nurses, secretaries and typists.

Table 12 11.
Nurses' grade

| Grade | Number | Percentage |
|-------------------------|--------|------------|
| learner | 34 | 50 |
| staff or enrolled nurse | 26 | 38 |
| sister/charge nurse | 8 | 12 |
| total | 68 | 100% |

Exactly half the nurses were qualified, which is a higher than expected proportion on general wards. This is explained by the exclusion of first ward learners and those new to the ward.

Table 12.12
Time working on the ward

| Time | Number | Percentage |
|----------------------|--------|------------|
| less than one month | 8 | 12 |
| less than six months | 37 | 54 |
| less than a year | 8 | 12 |
| more than a year | 15 | 22 |
| total | 68 | 100% |

The finding that only 12% of the nurses had worked on their current ward for less than a month strengthens the expectation that nurses should be able to report ward practices accurately.

Table 12.13

Summary of data from nurses' self-completion scale, showing total scale score and total sub-section scores, for each subject (n = 68)

| Ward | Subject no. | Total scale score (ranks) | General points (ranks) | Assessment (ranks) | Planning (ranks) | Implementation (ranks) | Evaluation (ranks) |
|-------------|-------------|---------------------------|------------------------|--------------------|------------------|------------------------|--------------------|
| 1 | 1 | 117 | 12 | 36 | 34 | 19 | 16 |
| 1 | 2 | 107 | 9 | 36 | 30 | 18 | 14 |
| 1 | 3 | 103 | 7 | 33 | 33 | 17 | 13 |
| 1 | 4 | 108 | 11 | 34 | 31 | 19 | 13 |
| 1 | 5 | 90 | 6 | 34 | 25 | 18 | 7 |
| 1 | 6 | 95 | 7 | 30 | 27 | 18 | 13 |
| 1 | 7 | 78 | 10 | 25 | 21 | 15 | 7 |
| 1 | 8 | 108 | 11 | 36 | 30 | 18 | 13 |
| 1 | 9 | 96 | 10 | 26 | 31 | 15 | 14 |
| 1 | 10 | 98 | 6 | 33 | 32 | 15 | 12 |
| Mean scores | | 100 (3) | 9 (4.5) | 32 (4) | 29 (1.5) | 17 (1.5) | 12 (4) |
| 2 | 11 | 105 | 11 | 30 | 33 | 17 | 14 |
| 2 | 12 | 94 | 7 | 34 | 25 | 15 | 13 |
| 2 | 13 | 93 | 6 | 30 | 27 | 17 | 13 |
| 2 | 14 | 103 | 10 | 35 | 32 | 17 | 9 |
| 2 | 15 | 116 | 12 | 38 | 34 | 18 | 14 |
| 2 | 16 | 107 | 8 | 36 | 32 | 16 | 15 |
| 2 | 17 | 98 | 11 | 32 | 27 | 17 | 11 |
| 2 | 18 | 98 | 10 | 32 | 26 | 16 | 14 |
| 2 | 19 | 110 | 8 | 36 | 32 | 19 | 15 |
| 2 | 20 | 87 | 9 | 27 | 26 | 18 | 7 |
| Mean scores | | 101 (1.5) | 9 (4.5) | 33 (2.5) | 27 (4) | 17 (1.5) | 13 (3) |
| 3 | 21 | 102 | 10 | 31 | 29 | 17 | 15 |
| 3 | 22 | 108 | 8 | 39 | 31 | 16 | 14 |
| 3 | 23 | 78 | 4 | 27 | 24 | 15 | 8 |
| 3 | 24 | 75 | 9 | 27 | 19 | 11 | 9 |
| 3 | 25 | 81 | 11 | 29 | 20 | 14 | 7 |
| 3 | 26 | 81 | 11 | 29 | 18 | 16 | 7 |
| 3 | 27 | 100 | 11 | 30 | 29 | 16 | 14 |
| 3 | 28 | 73 | 11 | 25 | 18 | 12 | 7 |
| Mean scores | | 87 (6.5) | 9 (4.5) | 30 (6) | 24 (7) | 15 (5) | 10 (6.5) |

Cont...

Table 12.13 (cont.)

| Ward | Subject no. | Total scale score (ranks) | General points (ranks) | Assessment (ranks) | Planning (ranks) | Implementation (ranks) | Evaluation (ranks) |
|-------------|-------------|---------------------------|------------------------|--------------------|------------------|------------------------|--------------------|
| 4 | 29 | 80 | 5 | 34 | 19 | 14 | 8 |
| 4 | 30 | 76 | 8 | 23 | 23 | 16 | 6 |
| 4 | 31 | 98 | 9 | 29 | 28 | 18 | 14 |
| 4 | 32 | 77 | 5 | 29 | 23 | 12 | 8 |
| 4 | 33 | 99 | 11 | 29 | 30 | 18 | 11 |
| 4 | 34 | 82 | 7 | 26 | 27 | 14 | 8 |
| 4 | 35 | 101 | 11 | 35 | 29 | 13 | 13 |
| 4 | 36 | 84 | 9 | 26 | 23 | 15 | 11 |
| Mean scores | | 87 (6.5) | 8 (7) | 29 (8) | 25 (6) | 15 (5) | 10 (6.5) |
| 7 | 37 | 100 | 10 | 39 | 33 | 15 | 3 |
| 7 | 38 | 96 | 10 | 35 | 25 | 16 | 10 |
| 7 | 39 | 77 | 7 | 29 | 21 | 11 | 9 |
| 7 | 40 | 78 | 9 | 28 | 21 | 13 | 7 |
| 7 | 41 | 122 | 12 | 39 | 36 | 19 | 16 |
| 7 | 42 | 91 | 11 | 33 | 22 | 13 | 12 |
| 7 | 43 | 99 | 9 | 32 | 29 | 14 | 15 |
| 7 | 44 | 94 | 12 | 28 | 28 | 16 | 10 |
| Mean scores | | 95 (5) | 10 (1.5) | 33 (2.5) | 27 (4) | 15 (5) | 10 (6.5) |
| 8 | 45 | 106 | 12 | 33 | 33 | 13 | 15 |
| 8 | 46 | 97 | 11 | 33 | 28 | 15 | 13 |
| 8 | 47 | 101 | 9 | 36 | 27 | 16 | 13 |
| 8 | 48 | 100 | 9 | 29 | 29 | 18 | 16 |
| 8 | 49 | 80 | 8 | 19 | 29 | 14 | 11 |
| 8 | 50 | 97 | 11 | 31 | 24 | 15 | 16 |
| 8 | 51 | 102 | 10 | 29 | 34 | 14 | 15 |
| Mean scores | | 97 (4) | 10 (1.5) | 30 (6) | 29 (1.5) | 15 (5) | 14 (1.5) |

Cont...

Table 12.13 (cont.)

| Ward | Subject no. | Total scale score (ranks) | General points (ranks) | Assessment (ranks) | Planning (ranks) | Implementation (ranks) | Evaluation (ranks) |
|-------------|-------------|---------------------------|------------------------|--------------------|------------------|------------------------|--------------------|
| 6 | 52 | 117 | 11 | 36 | 35 | 19 | 16 |
| 6 | 53 | 101 | 11 | 35 | 26 | 17 | 12 |
| 6 | 54 | 96 | 8 | 34 | 26 | 15 | 13 |
| 6 | 55 | 92 | 9 | 32 | 22 | 16 | 13 |
| 6 | 56 | 100 | 5 | 33 | 30 | 18 | 14 |
| 6 | 57 | 102 | 8 | 38 | 27 | 16 | 13 |
| 6 | 58 | 110 | 10 | 36 | 31 | 18 | 15 |
| 6 | 59 | 106 | 12 | 36 | 25 | 15 | 18 |
| 6 | 60 | 82 | 11 | 26 | 19 | 16 | 10 |
| Mean scores | | 101 (1.5) | 9 (4.5) | 34 (1) | 27 (4) | 15 (5) | 14 (1.5) |
| 5 | 61 | 73 | 6 | 24 | 21 | 13 | 9 |
| 5 | 62 | 75 | 5 | 20 | 22 | 16 | 12 |
| 5 | 63 | 99 | 7 | 34 | 30 | 16 | 12 |
| 5 | 64 | 86 | 11 | 32 | 23 | 11 | 9 |
| 5 | 65 | 97 | 5 | 31 | 33 | 14 | 14 |
| 5 | 66 | 73 | 8 | 29 | 16 | 14 | 6 |
| 5 | 67 | 100 | 10 | 36 | 25 | 16 | 13 |
| 5 | 68 | 74 | 6 | 31 | 16 | 14 | 7 |
| Mean scores | | 84 (8) | 7 (8) | 30 (6) | 23 (8) | 14 (8) | 10 (6.5) |

Table 12.13 permits examination of the rank order of wards for nurses' ratings of NP use. This can be seen more clearly in Figure 12.3

Figure 12.3 - see overleaf (p. 365)

Figure 12.3

Rank order of wards' use of nursing process as shown by scores on nurses' self-completion scale

| | total scale score | general points | nursing assessment | planning of nursing care | implementation of nursing care | evaluation of nursing care |
|----------------------------|----------------------|----------------------|------------------------------------------------|--------------------------|--------------------------------|----------------------------|
| wards listed in rank order | <p>↑</p> <p>2, 6</p> | <p>↑</p> <p>7, 8</p> | <p>↑</p> <p>6</p> | <p>↑</p> <p>1, 8</p> | <p>↑</p> <p>1, 2</p> | <p>↑</p> <p>6, 8</p> |
| | <p>1</p> | <p>1, 2, 3, 6</p> | <p>2, 7</p> | <p>2, 6, 7</p> | | <p>2</p> |
| | <p>8</p> | | <p>1</p> | <p>4</p> | <p>3, 4, 6, 7, 8</p> | <p>1</p> |
| | <p>7</p> | <p>4</p> | <p>3, 5, 8</p> | <p>3</p> | | |
| | <p>3, 4</p> | <p>5</p> | <p>4</p> | <p>5</p> | <p>5</p> | <p>3, 4, 5, 7</p> |
| | <p>5</p> <p>↓</p> | <p>↓</p> | <p>↓</p> <p>minimum use of nursing process</p> | <p>↓</p> | <p>↓</p> | <p>↓</p> |

Comparison of Figure 12.3 above with Figure 11.2 shows that this ranking accords to some extent with the rank order of wards implied by NOs and sisters' predictions of NP use. Although statistical analysis is inappropriate, some agreement is apparent.

Comparison of Figure 12.3 with Figure 12.1 reveals a statistically significant positive correlation between the nurses' and the researchers' overall rankings of wards for NP use (r_s 0.83 $p < .01$)

Table 12.14

Range of possible total and subscale scores for the self-completion scale

| Section of the scale | maximum score "yes" | mean score "to some extent" | minimum score "no" |
|--------------------------|---------------------|-----------------------------|--------------------|
| total scale (43 items) | 129 | 86 | 43 |
| general points (4 items) | 12 | 8 | 4 |
| assessment (13 items) | 39 | 26 | 13 |
| planning (13 items) | 39 | 26 | 13 |
| implementation (7 items) | 21 | 14 | 7 |
| evaluation (6 items) | 18 | 12 | 6 |

Table 12.15

Range of actual total and subscale scores for the self-completion scale, using the mean ward scores

| Section of the scale | maximum ward mean score | mean ward mean score | minimum ward mean score |
|--------------------------|-------------------------|----------------------|-------------------------|
| total scale (43 items) | 101 | 94 | 81 |
| general points (4 items) | 10 | 9 | 7 |
| assessment (13 items) | 34 | 31 | 29 |
| planning (13 items) | 29 | 26 | 23 |
| implementation (7 items) | 17 | 15 | 14 |
| evaluation (6 items) | 14 | 12 | 10 |

Figures 12.4 - 12.9

The range of possible and actual mean ward scores for the nurses' self-completion scale, showing the proportion of the possible range covered by the actual range

Figure 12.4

Total scale scores

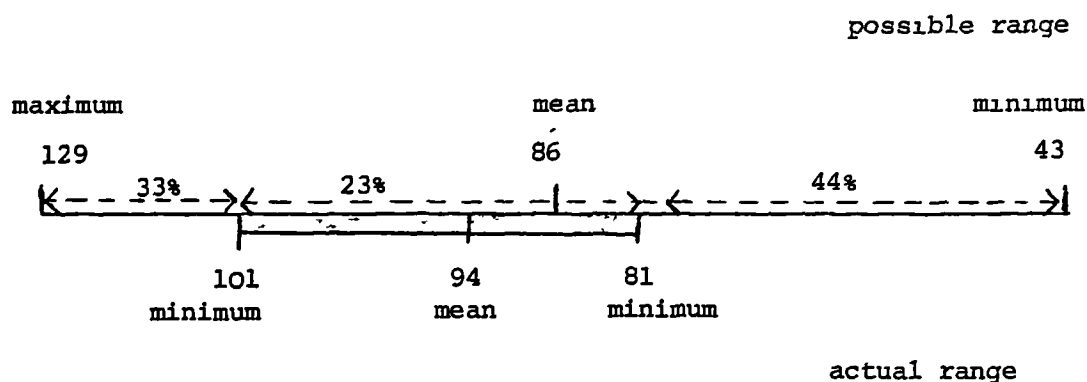


Figure 12.5

General points subscale

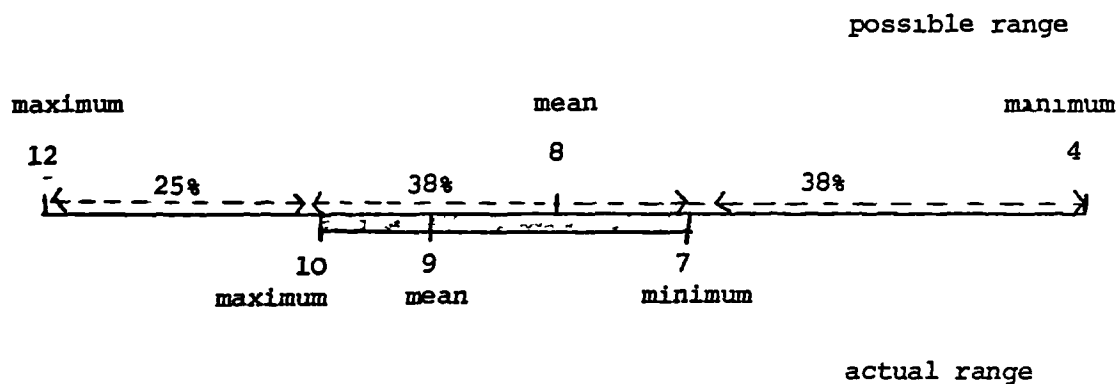


Figure 12.6

Nursing assessment subscale

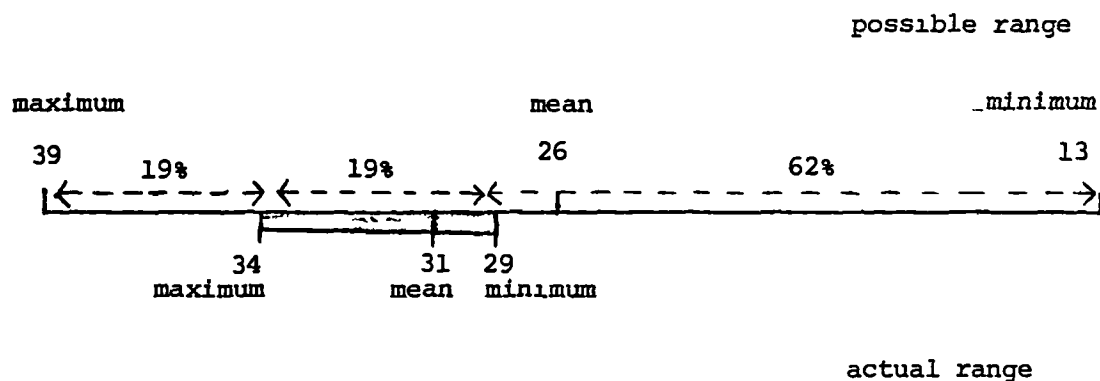
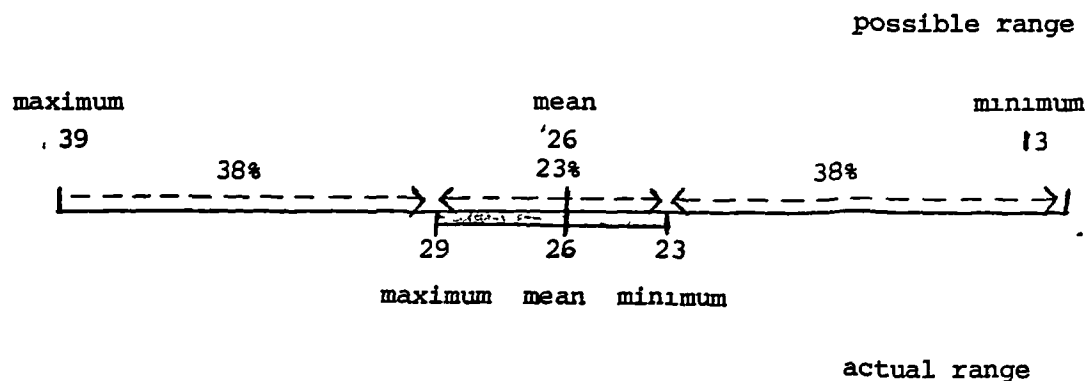
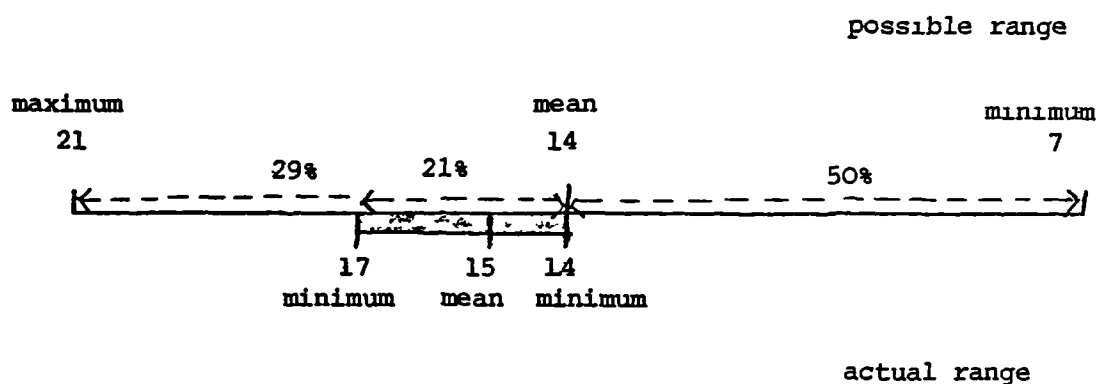
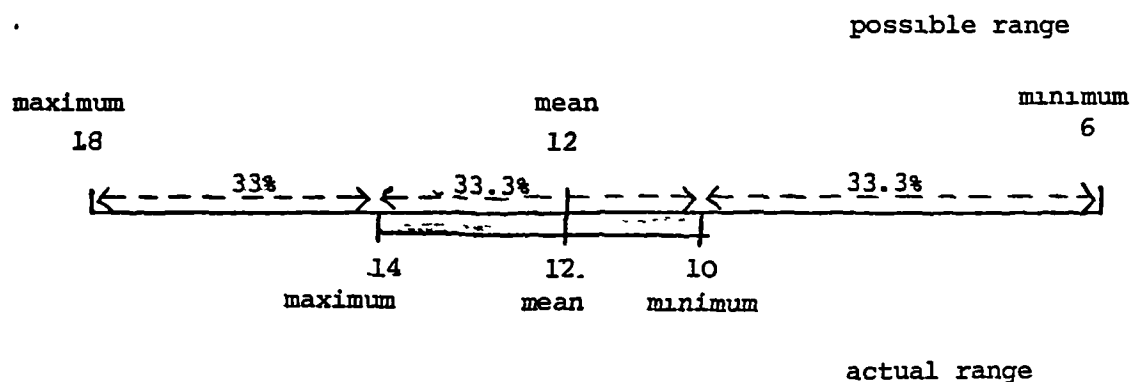


Figure 12.7Planning of nursing care subscaleFigure 12.8Implementation of nursing care subscaleFigure 12.9Evaluation of nursing care subscale

Tables 12.14 and 12.15 and Figures 12.4 to 12.9 show that overall the nurses' scores covered only a small proportion of the possible distribution. This indicates that there were either very small differences among the wards, or that nurses were unable to make fine discriminations or that the scale lacked sensitivity. Figure 12.4 shows that for the total scale scores only 23% of the possible distribution (range 81 to 101) was actually used. This contrasts with the observers' total scale scores which covered a much greater proportion of the possible distribution (57.6%, range 59 to 108.5). The major discrepancy exists in the lower scores as the observers produced minimum scores of 59, whereas the nurses produced minimum scores of 81. There was little difference in the use of higher scores (researchers' maximum 108.5, nurses' maximum 101).

Figures 12.5 to 12.9 revealed that nurses used the greatest proportion of the possible distribution for general points (38% and evaluation (33.3%). This confirms the observation that there was most variability among wards concerning general points and evaluation, therefore divergent scores would be expected. The smallest proportion of the possible distribution was used for assessment (19%) and implementation of care (21%). As most of the wards were observed to be doing some patient assessment and using patient allocation to some extent, convergent scores could be predicted.

Table 12.16

Summary results of chi squared tests (for N x 1 matrices) on the nurses' total scale scores for each ward

| Wards | χ^2 (to 2 decimal places) | df | p | significance |
|-------|-----------------------------------|----|---------------|----------------------------|
| 1 | 11.49 | 9 | $> .2$ | NS |
| 2 | 6.82 | 9 | $> .5$ | NS |
| 3 | 15.26 | 7 | $< .05 > .02$ | significant at 5% level |
| 4 | 8.97 | 7 | $> .3$ | NS |
| 5 | 12.82 | 7 | $> .05$ | NS |
| 6 | 8.23 | 8 | $> .3$ | NS |
| 7 | 16.93 | 7 | $< .02 > .01$ | significant at 2% level |
| 8 | 4.33 | 6 | $> .5$ | NS |

On six of the eight wards there were no significant differences among nurses on their total scale scores. This indicates that the nurses on each ward were generally fairly consistent in their ratings of the use of NP.

Table 12.17

Results of Wilcoxon Rank Sum tests to examine differences between the total scale scores of nurses educated to degree or A level standard and nurses educated to O level standard or less, in each ward

| Ward | n ₁ | n ₂ | T | T ₁ | p | significance |
|------|----------------|----------------|------|----------------|---------------------------------------------------------|--------------|
| 1 | 5 | 5 | 26.5 | 28.5 | > .2 | NS |
| 2 | 5 | 5 | 22.5 | 32.5 | > .2 | NS |
| 3 | 2 | 6 | 5 | 13 | > .2 | NS |
| 4 | 3 | 5 | 12 | 15 | > .2 | NS |
| 5 | 2 | 6 | 4.5 | 13.5 | > .2 | NS |
| 6 | 3 | 6 | 14 | 16 | > .2 | NS |
| 7 | 2 | 6 | 9 | 9 | > .2 | NS |
| 8 | 1 | 6 | 1 | 7 | cannot be statistically tested, with n ₁ = 1 | |

There were no significant differences on any wards between the total scale scores of nurses educated to degree or A level standard and nurses educated to O level standard or less. This is further evidence of the consistency of nurses of all educational levels in each ward in rating the use of NP.

Table 12.18

Results of Wilcoxon Rank Sum tests to examine differences between the total scale scores of qualified nurses (sister, SN or SEN) and learner nurses

| Ward | n ₁ | n ₂ | T | T ₁ | p | significance |
|------|----------------|----------------|------|----------------|------------------------------------------------|--------------|
| 1 | 4 | 6 | 23.5 | 20.5 | > .2 | NS |
| 2 | 3 | 7 | 12.5 | 20.5 | > .2 | NS |
| 3 | 3 | 5 | 18 | 9 | > .2 | NS |
| 4 | 4 | 4 | 12 | 24 | > .1 | NS |
| | | | | | (qualified nurses higher scores than learners) | |
| 5 | 3 | 5 | 12.5 | 14.5 | > .2 | NS |
| 6 | 2 | 7 | 9 | 11 | > .2 | NS |
| 7 | 3 | 5 | 11 | 16 | > .2 | NS |
| 8 | 2 | 5 | 5 | 11 | > .2 | NS |

There were no significant differences on any wards between the total scale scores of qualified nurses and learner nurses. This provides further evidence of the consistency of nurses of all grades in each ward in rating the use of NP.

The total scale scores for all sisters were compared with the total scale scores for all other qualified nurses (SNs and SENs). The Wilcoxon Rank Sum test, which is equivalent to the Mann Whitney U test, has to be modified for samples in which $n_2 > 20$ because the sampling distribution of U rapidly approaches the normal distribution (Siegel, 1956).

$$n_1 \text{ (sister)} = 8$$

$$n_2 \text{ (SNs and SENs)} = 26$$

$$R_1 = 103$$

$$R_2 = 482$$

$$U = 141$$

$$Z = 1.504$$

$$p = .124 \text{ (2 tailed test) N.S.}$$

There was no difference between the total scale scores of sisters and those of other qualified nurses. This finding and data from Tables 12.16 12.17 and 12.18 consistently confirm the hypothesis that nurses in each ward are consistent in their ratings of NP usage in their wards.

If the eight wards are considered as a single entity, it is possible to identify the rank order of total scores for each item on the NP scale. This indicates the pattern of development of NP in these wards and suggests which aspects of NP were found most easy and most difficult to implement. A similar analysis was done with NP data from the 16 wards used for the questionnaire survey (see Table 8.47 pp.262-263).

Table 12.19

See overleaf (p. 372)

Table 12.19

Items in the nursing process scale in rank order of total scores, from highest to lowest, using data from nurses' self-completion scales

| Rank | No. of item. | Item | Summary description | Total score | Mean score ie total ÷ 68 |
|------|--------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------|--------------------------|
| 43 | 9 | Are nursing observations made of the patient's physical state ? | assessment | 200 | 2.941 |
| 42 | 31 | Is a system of patient allocation used throughout the ward ? | implementation | 196 | 2.882 |
| 41 | 19 | Is the care plan regularly updated ? | care planning | 193 | 2.838 |
| 40 | 35 | Is each nurse responsible for the written progress reports and verbal handover for her patient or group of patients ? | implementation | 192 | 2.824 |
| 39 | 8 | Is the nursing history usually taken within 24 hours of admission? | assessment | 189 | 2.779 |
| 38 | 3 | Is the nursing process taught to learners in the school of nursing? | general points | 187 | 2.75 |
| 36 | 10 | Are nursing observations made of the patient's psychological state ? | assessment planned nursing actions care planning | 181 | 2.662 |
| | 28 | Are planned nursing actions incorporated into the care plan ? | | | |
| | 18 | Is a written care plan produced which incorporates patient's problems and/or needs ? | | | |
| 34 | 6 | Is an assessment made of all new patients prior to implementation of nursing care ? | assessment | 180 | 2.647 |
| 32.5 | 4 | Could the ward sister be described as democratic i.e. does she involve nurses in decisions and does she delegate responsibility? | general points assessment | 177 | 2.603 |
| | 5 | Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients ? | | | |

Cont....

Table 12.19 (Cont.)

| Rank | No. of item's | Item | Summary description | Total score | Mean score ie total ÷ 68 |
|------|---------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|--------------------------|
| 31 | 12 | Are other information sources used in assessment, e.g. medical notes or district nurse's notes ? | assessment | 173 | 2.544 |
| 30 | 1 | Have any of the following been held to teach nursing process to ward staff: study days, lectures, discussions or tutorials ? | general points | 170 | 2.5 |
| 29 | 7 | Is a written nursing history taken, using a systematic format ? | assessment | 166 | 2.441 |
| 27.5 | 11 | Are nursing observations made of the patient's social and economic state ? | assessment evaluation | 164 | 2.412 |
| | 43 | Are the care plans and nursing actions modified according to the results of the evaluation ? | | | |
| 26 | 15 | Is an attempt made to find the cause of the patient's problems e.g. psychological, social, etc ? | problem identification | 163 | 2.397 |
| 25 | 38 | Is systematic evaluation of care considered essential for all patients ? | evaluation | 162 | 2.382 |
| 24 | 33 | Is the verbal handover (ward report) based on the care plans ? | implementation | 161 | 2.367 |
| 23 | 34 | Are the written nursing progress reports based on patient problems and goals ? | implementation | 152 | 2.235 |
| 21.5 | 13 | Are nursing problems identified for all new patients, prior to implementing nursing care ? | problem identification care planning | 151 | 2.221 |
| | 20 | Are nursing care planning discussions, conferences or rounds held on the ward ? | | | |
| 20 | 14 | Are potential and/or possible problems identified as well as actual problems ? | problem identification | 149 | 2.191 |

Cont....

Figure 12.19 (cont.)

| Rank | No. of item | Item | Summary description | Total score | Mean score ie total ÷ 68 |
|------|-------------|---------------------------------------------------------------------------------------------------|-------------------------------|-------------|--------------------------|
| 19 | 30 | Are planned nursing actions written very precisely and in detail ? | planned nursing actions | 147 | 2.162 |
| 18 | 32 | Is a nurse allocated to the same patient or group of patients for several days ? | implementation | 142 | 2.088 |
| 17 | 37 | Do both day and night nursing staff use the care plan as a basis for giving care ? | implementation | 141 | 2.073 |
| 16 | 41 | Is the patient's progress towards the goals evaluated both objectively and subjectively ? | evaluation | 134 | 1.971 |
| 15 | 22 | Are goals (nursing objectives) incorporated into the care plan ? | goal setting | 132 | 1.941 |
| 14 | 39 | Is evaluation recorded on either the care plan or the progress notes ? | evaluation | 131 | 1.927 |
| 13 | 29 | Are planned nursing actions agreed upon with the patient and/or his family ? | planned nursing actions | 129 | 1.897 |
| 12 | 25 | Are the goals always realistic ? | goal setting | 127 | 1.868 |
| 11 | 26 | Are the goals patient centred i.e. written in terms of patient outcomes or behaviour ? | goal setting | 126 | 1.853 |
| 9.5 | 23 | Does the statement of goals include both long-term and short-term goals ? | goal setting care planning | 125 | 1.838 |
| | 21 | Does the care plan include discharge planning ? | | | |
| 8 | 16 | Are the problem statements arranged in a hierarchy of importance i.e. are priorities identified ? | problem identification | 121 | 1.779 |

Cont....

Figure 12.19 (cont.)

| Rank | No. of item | Item | Summary description | Total score | Mean score total ÷ 68 |
|------|-------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------|--------------------------|
| 7 | 17 | Is the statement of problems made with the knowledge, understanding and agreement of the patient ? | problem identification | | 1.706 |
| 6 | 42 | Are the patient and/or his family included in evaluation | evaluation | 115 | 1.691 |
| 5 | 24 | Are the goals agreed upon with the patient and/or the family ? | goal setting | 109 | 1.603 |
| 4 | 27 | Do the goals include a time element ? | goal setting | 95 | 1.397 |
| 3 | 2 | Have all the permanent ward nursing staff attended at least one study day, lecture, discussion or tutorial on the nursing process ? | general points | 88 | 1.294 |
| 2 | 40 | Is a data for the evaluation of any nursing action included in the care plan ? | evaluation | 84 | 1.235 |
| 1 | 36 | Do nurses take part in the medical rounds for their particular patients ? | implementation | 81 | 1.191 |

Data in Tables 12.19 and 8.47 were compared. As only 40 items were ranked in Table 8.47, data in Table 12.19 were adjusted to eliminate items which did not appear in both tables. There was a statistically significant positive correlation between the rank order of items in the two scales (r_s 0.72 $p < .01$), which shows that the pattern of development of NP use was similar in these different hospitals.

Table 12.19 shows that items concerning general points (1 to 4) were spread throughout the distribution. Items concerning assessment (5 to 12) were all in the top half of the ranks. Problem identification items (13 to 17) were mostly in the bottom half of the ranks. Care planning items (18 to 21) were mostly in the top half. Goal setting items (22 to 27) were all in the bottom half. Planned nursing actions (28 to 30) were in the two middle quartiles. Implementation items (31 to 37) were spread throughout the distribution. Evaluation items (38 to 43) were mostly in the bottom half.

It thus appears that the order in which various aspects of NP were developed in these eight wards was: firstly assessment and care planning; then planned nursing actions; followed by problem identification and evaluation; and lastly goal setting.

12.1.3 Nursing officers' ward ratings

Two Nos were asked to rate the use of NP in each ward on the NOs ward-rating scale (see Appendix Part 3 Number 9). Five aspects of NP use were each rated on a five point scale. The hospital had appointed one NO for the NP who rated each ward. She did this without difficulty and appeared well informed about the extent of NP implementation. However, she did indicate that her knowledge would have been insufficient to rate all 43 items in the main scale. A Unit NO, of whom there were four for these wards, also rated each ward. They found the task difficult and claimed that since the appointment of the NO for NP they had little involvement in developing NP. The NOs' scores are shown in Table 12.20.

Table 12.20

See overleaf (p. 377)

Despite the Unit NOs' doubts about their knowledge of NP implementation, there was a significant positive correlation between the two NOs' total scores for each ward (r_s 0.82 $p < .05$). This shows that the NOs ranked the eight wards for use of NP very similarly. There was, however, no significant correlation between their total scores for the five categories across all wards (r_s 0.51 N.S.)

12.2 VALIDITY AND RELIABILITY OF THE SCALE

In Section 5.2 and subsections the concepts of validity, reliability and sensitivity were explained and the main types of validity and reliability were outlined.

12.2.1 Test-retest reliability

The procedure was outlined in Section 11.3.5

Table 12.21

Total scores on the nurses' self-completion scale for 8 qualified nurses, showing original scores and scores at 2 month retest

| Subject no. | first administration | | 2 month retest | |
|-------------|----------------------|------|----------------|------|
| | score | rank | score | rank |
| 1 | 117 | 1 | 120 | 1 |
| 7 | 78 | 7 | 83 | 6 |
| 9 | 96 | 4 | 101 | 3 |
| 18 | 98 | 3 | 98 | 4 |
| 20 | 87 | 5 | 95 | 5 |
| 24 | 75 | 8 | 77 | 7 |
| 25 | 81 | 6 | 76 | 8 |
| 35 | 101 | 2 | 104 | 2 |

There was a statistically significant positive correlation between the scores on first administration and at 2 month retest (r_s 0.91 $p < .01$). This indicates a very high test-retest reliability. It can be seen that 6 of the 8 subjects obtained slightly higher scores at retest and only one subject obtained a lower score. This may reflect the continued development of NP in those wards.

12.2.2 Alternate form reliability

The ^ascale was constructed from a fairly small initial item pool derived from the literature. It was not therefore possible to construct an alternate form of the scale.

12.2.3 Internal homogeneity of the scale

Corrected item index correlation coefficient and Cronbach's alpha require computer analysis and will be the subject of further papers.

Split half reliability was calculated by correlating each nurse subjects' ($n = 68$) total scores on the odd numbered items with total scores on the even numbered items. Because longer tests are more reliable and split half halves the length of the test, thus producing an artificially low correlation coefficient, Anastasi (1976) recommended the use of the Spearman Brown correction. However a statistically significant positive correlation was found between the two sets of scores without the correction (the Pearson $r = 0.28$ with 66 df $p < .05$ for 2-tailed test). This indicates that the scale is internally consistent.

12.2.4 Scorer reliability

Inter-rater reliability was examined in several ways. Section 12.1.1.2 shows that there was a significant positive correlation between the independent ratings of NP use by the two observers ($r_s 0.85$ $p < .01$). There were also significant positive correlations (from $r_s 0.76$ to 0.87 $p < .05$) between the two observers for scores on each section of the observation/information-gathering schedule (see Table 12.4.) Section 12.1.3 shows that there was a significant positive correlation between the independent ratings of NP use by the two NOs ($r_s 0.82$ $p < .05$).

Nurses in Wards 2, 6, 7 and 8 were tested in two groups. The main researcher tested one group and the research assistant tested the other group. There was no significant difference between the scores obtained by the groups tested by each researcher (the Wilcoxon Rank Sum Test for 2 independent samples, 2 tailed test, $T = 269$, $T_1 = 326$ $p > .2$ NS). This suggests that researcher bias did not systematically affect the nurses' ratings. Data from the nurses' self-completion scale were independently coded by both researchers and less than 1% error was found.

12.2.5 Face validity

This was established by asking the 68 nurses what the scale appeared to be about after they had completed it. All were unequivocal that it appeared to measure the use of NP in the ward.

12.2.6 Content validity

Content validity is not quantifiable but is built into a test through the selection of appropriate items. According to Kerlinger (1973) this is usually determined by an examination of relevant literature and consultation with subject matter experts. Both these procedures were carried out in developing the scale (see Sections 10.2, 10.3 and sub-sections), thus ensuring high level of content validity.

12.2.7 Criterion-related validity

Concurrent criterion-related validity was tested in several ways. Scores obtained from observation of the wards were correlated with

cumulative scores obtained from nurses' self-completion questionnaires. Comparison of Figures 12.3 and 12.1 reveal a statistically significant positive correlation (r_s 0.83 $p = .01$).

NOs' mean ward ratings (see Table 12.20) were correlated with the mean observers' ward ratings (see Table 12.1). A statistically significant positive correlation was found (r_s 0.76 $p < .05$). NOs' mean ward ratings were also correlated with data from the nurses' self-completion scale (see Table 12.13). A statistically significant positive correlation was found (r_s 0.81 $p < .05$).

Predictive criterion measures were not used in this study for two reasons: firstly, none of the wards regarded their use of NP as fully developed and wards were changing rapidly; secondly, the identification and measurement of predictive criteria would be methodologically complex and beyond the time constraints of this study.

12.2.7.1 Additional data on concurrent criterion-related validity

In a Chelsea College undergraduate project described in Section 4.2.7.5 (page 96), Corner (1983) compared the use of nursing/midwifery process and traditional patterns of care in two ante-natal clinics. The NP scale was used to identify differences in the types of care provided by the two units. Corner used the scale as an observation/information-gathering tool and made minor modifications to use the scale in this context. Details of her modified scoring system were not available, so the maximum and minimum scores possible are unknown.

Clinic 1 obtained an NP score of 390. The sisters and NOs claimed to have been using NP for three years. Corner found that women were usually seen by the same midwife on each visit and all tests and examinations were carried out in one cubicle. Corner observed that a history was taken, problems and needs were identified, goals were formulated, and care was planned and evaluated. Clinic 1 was found to be more effective in achieving several of the aims of ante-natal care (defined from a literature review) than Clinic 2.

Clinic 2 obtained an NP score of 245. The sisters and NOs did not claim that NP was in use. Care was observed by Corner to be task-oriented with little continuity of care. There was a separate booking system and women were moved through the clinic like a "conveyor belt", having different tests and examinations in different rooms.

The direction of differences in the NP scores is in line with other independently collected data concerning the use of NP in the two clinics. Other criteria of NP use included information from interviews with nurses

and pregnant women and the researcher's structured observations. This provides additional evidence of the concurrent criterion-related validity of the schedule.

12.2.8 Construct validity

Construct validity is concerned with whether the test measures the underlying theoretical construct and is established by the gradual accumulation of information from various sources, such as factor analysis, correlations with other tests, developmental changes over time etc.

Factor analysis will be the subject of further papers. This will enable the scale to be characterised in terms of the major factors determining its scores, together with the weight of each factor. Preliminary analysis, discussed earlier in this chapter, suggests that of the generally accepted stages of NP, evaluation and goal setting, stand out as two strongly separate factors. Other stages of NP appear not to be clearly divided in separate factors.

Developmental changes over time were examined in a small 18 month follow-up study of two wards, which is discussed below:

12.2.8.1 Eighteen month follow-up study

A modified replication of the study was carried out in 1983 which aimed to examine changes in two wards over 18 months. Permission to conduct the study was obtained from the relevant sisters, NOs and Directors of Nursing. The procedure was identical to the main study except that data were collected by the original research assistant and another graduate nurse, formerly the sister of Ward 7. To familiarize the researchers with the procedure a small pilot test was carried out in the original pilot ward.

Wards 2 and 5 were retested. Eleven nurses completed scales in W2 and 13 nurses in W5. W2 had previously obtained the highest NP scores and W5 the lowest. Both sisters were interviewed for about 15 minutes using a structured interview schedule to obtain their views about changes over the previous 18 months. Sister on W2 was still very positive about NP and claimed to have further developed its use, including introducing primary nursing. Sister on W5 was reluctant to be interviewed^e and claimed limited knowledge of NP concepts. She thought NP had no advantages and was excessively time consuming. She had not found time to read about NP and considered the hospital's workshops to be "rubbish". She indicated that the only new developments in her ward were that students reported on their own patients and had more contact with doctors and that bed-making rounds were stopped.

A summary of the data obtained is shown in Table 12.22 overleaf...

Table 12.22

Summary of original data and 18 month retest data for Wards 2 and 5

| description of data | Ward 2 | | Ward 5 | |
|---------------------------------------------|---------------|-----------------|---------------|-----------------|
| | original data | 18 month retest | original data | 18 month retest |
| mean <u>observers'</u> ratings | 108.5 | 107 | 59 | 70 |
| mean nurses' self-ratings | 101 | 110 | 84 | 90 |
| nurses' <u>self-rating</u> : general points | 9 | 10 | 7 | 7 |
| assessment | 33 | 35 | 30 | 33 |
| planning | 27 | 32 | 23 | 24 |
| implementation | 18 | 18 | 14 | 16 |
| evaluation | 13 | 15 | 10 | 10 |
| 2 NO's total scores | 46 (21,25) | 45 (20,25) | 27 (10,17) | 26 (10,16) |

The mean observers' ratings on W2 were unchanged over 18 months, although the research assistant involved in both phases of data collection claimed to observe small improvements in many aspects of NP use, but which were insufficient to produce changes in the short response scale. The increase in observers' ratings in W5 could be accounted for by the NP documentation (see Appendix Part 3 Number 13) imposed on the ward during the previous 18 months.

The mean nurses' self-ratings increased from 101 to 110 (9 points) presumably because of the large number of nurses involved (n=11 compared with only two observers. The main changes were in assessment, planning and evaluation of care). Similarly, nurses' mean scores in W5 changed from 84 to 90 (6 points), presumably because of new documentation. The main changes were for assessment and implementation of care. Despite very negative senior staff attitudes, scores changed, indicating that the scale is more sensitive to changes in documentation^{at} than to more nebulous aspects such as nurses' attitudes.

NOs' scores for each ward remained essentially the same over 18 months.

Table 12.23.

Summary of the reliability of the scale

See overleaf (p. 383)

12.2.9 Summary of reliability and validity

Table 12.23. Summary of the reliability of the scale

| type of reliability | usual method of testing | method of testing in this study | statistics and results | conclusion |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| test-retest reliability | scores from same S's on 2 separate administrations correlated | 8 qualified nurses re-tested after 2 month interval and scores correlated | Spearman r_s 0.905 $p < .01$ | high test - retest reliability |
| alternate form reliability | scores from 2 alternate forms of the same test correlated | not tested because no alternate form of same test available | N/A | alternate form reliability not tested |
| internal homogeneity | (1) corrected item index correlation coefficient (2) Cronbach's alpha or Kuder Richardson (3) Split-half reliability | (1) and (2) will be the subject of further analysis later. Split-half reliability i.e. each nurse's total scores on odd numbered items, correlated with total scores on even number of items | Pearson r (without Spearman Brown correction) 0.28 with 66 df $p < .05$ | high split-half reliability |
| scorer reliability | scores from 2 or more raters correlated | nurses' data independently coded by both researchers differences between nurses' data accorded to which tester 2 NOS ratings of NP use correlated 2 observers' overall ratings of NP use correlated 2 observers' rating of NP use on each section correlated | level of error less than 1% Wilcoxon rank sum test T 269, T ₁ 326 $p > .2$ NS Spearman r_s 0.817 $p < .05$ Spearman r_s 0.852 $p < .01$ Spearman r_s from 0.76 to 0.87 $p < .05$ | high scorer or inter-rater reliability |

Table 12.24. Summary of the validity of the scale

| type of validity | usual method of testing | method of testing in this study | statistics and results | conclusion |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| face validity | subjective assessment of test's appearance | nurses asked what scale appeared to be about | all accurate in describing nature of test, statistics not applicable | high face validity |
| content validity | choice of appropriate items through: - description of domain - analysis of literature - consultation with subject experts | Items derived from literature initial validation by panel of NP experts | not quantifiable. but use of correct procedures ensures high content validity | high content validity |
| criterion-related validity | scale scores correlated with direct independent measures concurrently or in the future (predictive) | observers' scores correlated with nurses' self-ratings Nurses' ward rating correlated with observers' ratings Nurses' ward ratings correlated with nurses' self-ratings scale used in ante-natal clinics in conjunction with other independent measures | Spearman r_s 0.833 $p = 0.1$ r_s 0.762 $p < .05$ r_s 0.809 $p < .05$ differences in NP scores in 2 clinics in line with other independent measures | high concurrent criterion-related validity predictive criterion validity not tested |
| construct validity | gradual accumulation of information such as: development changes, factor analysis, correlations with other tests, etc. | factor analysis will be the subject of further papers later. Preliminary examination of data suggests: changes over time examined in 18 month follow-up of the 2 highest and lowest scoring wards | evaluation and goal setting appear to be 2 separate factors small changes in scores associated with introduction of NP documentation, but scale too insensitive to pick up other small changes identified by observers | construct validity not fully tested but existing data indicate fair construct validity only |

12.2.10. Sensitivity of the scale

The nurses' total scale scores covered only 23% of the possible distribution, with no scores in the top 44% or bottom 33% (see Figure 12.4). Several explanations are possible. Firstly there may have been only limited differences among wards, in which case widely divergent scores would not occur. On the basis of other information about the wards this was clearly true and the wards did not differ sufficiently to test fully the sensitivity of the scale. A second explanation is that nurses were unable to make fine discriminations. Support for this comes from the observers' scores on the same wards which covered 58% of the possible distribution. Clearly observers were able to make finer discriminations, possibly because they had explicit directions about sources of observation and information, whereas nurses were required to make more general judgments. The last explanation is that the scale lacked sensitivity, either because of inappropriate items or because the response scale was too short. As indicated earlier the research assistant who collected both original and 18 month follow-up data commented that the response categories were inadequate to pick up the small changes she observed over 18 months. Two nurse subjects also commented on the inadequacy of the response scale.

As the scale has not been tested in words which are either totally task-oriented or using NP totally, it is impossible to be sure how sensitive the scale actually is.

PART 3. CHAPTER 13

DISCUSSION

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PART 3. CHAPTER 13.

DISCUSSION

This chapter contains a critical discussion of the methods of scale development and testing. The second half of the chapter is a description of the final version of the NP measuring scale, including directions for use.

13.1 METHODS OF SCALE DEVELOPMENT

13.1.1 Development of first draft from the literature

Selecting scale items from relevant literature is a well accepted procedure for ensuring content validity. Clearly the literature review was selective and incomplete. Because of its availability, American work may have been over-represented at the expense of literature from Europe and other parts of the world. It might have been preferable to confine the review to British literature published within a particular time period.

13.1.2 Initial validation by the panel of experts

According to Treece and Treece (1977) the use of a jury of experts to judge the content of an instrument is an appropriate technique for ensuring content validity. The panel of experts contained a good balance between academics and practitioners; there were enough members ($n = 37$) to eliminate idiosyncratic responses; and the 74% response rate was high for a postal questionnaire.

Diverse views were expressed by the experts and complete consensus was not achieved. There were some clear discrepancies between the literature and the experts. For example, some American literature recommended keeping care plans at the bedside where patients could read them, but this was strongly rejected by the British experts. This may reflect cultural differences concerning consumerism and awareness of patients' rights.

It was apparent that some members of the panel failed to distinguish between items which were important for the use of NP and those which were important for high quality care, irrespective of NP use. An example is the item about creating a positive atmosphere and relationship of trust with new patients, which was rated as important, but is clearly not specific to the use of NP. Other questions were so worded that they invariably produced positive responses e.g. the item about whether goals were always realistic.

Generally, information provided by the panel of experts was useful

in eliminating obviously unsuitable items and for rewording obviously ambiguous items.

13.1.3 Developing methods of obtaining information

The ward observation/information schedule was used without difficulty and produced meaningful results. The nature, advantages and disadvantages of observation as a research technique are discussed at Section 5.1.7. Several problems were identified and some changes to the scale and procedure were necessary. The response categories were changed from four to six points. Section D "Focussed conversation with five randomly selected patients" added recommendations for wording questions to patients to increase standardisation. Patients cannot be randomly selected so the wording was changed to "Focussed conversation with five patients, as different from each other as possible" Section E was extended to include "Observation of admission of two or three patients, including observations of two or three newly admitted patients". Section I "Observation of evaluation session with one patient" was discarded as evaluation is likely to take place during informal contacts and at handover reports. Section J was extended to include "General observation of and focussed discussion with four nurses-sister, qualified nurse, senior and junior learners".

There was no procedure for obtaining consent from nurses, patients and relatives who were to be observed or interviewed. Consent was assumed if they failed to object. The study would be strengthened ethically if an explicit request for verbal consent were made, following a brief explanation of the study.

Only first year trainee nurses had difficulty completing the nurses' self-completion scale and they should be excluded in future. Nurses in each ward were fairly consistent in their ratings of the use of NP (see Table 12.16) irrespective of their educational background (Table 12.17) or seniority (Table 12.18). Responses from the 68 nurses provided useful information for further revising the scale. The response scale was lengthened from four to six points and several items were removed, reworded or repositioned.

There were no difficulties with the NOs ward-rating scale.

13.1.4 Testing for validity, reliability and sensitivity

Testing techniques were comprehensive but analysis was limited. Had the data been computer analysed more complex tests such as factor analysis, Cronbach's alpha and corrected item index correlation coefficients could have been performed. These will be the subject of further levels of

analysis and will provide additional information about the construct validity and internal homogeneity of the scales. Tables 12.23 and 12.24 summarize the validity and reliability data and show that the test achieved high levels of test-retest, split-half and scorer reliability and high levels of face, content and concurrent criterion-related validity.

The sensitivity of the scale is uncertain, but appeared to be reduced by the very short response scale.

13.2 THE COMPLETED NURSING PROCESS MEASURING SCALE

13.2.1 Ward nurses' self-rating scale

A copy of the final version of the revised scale is at Appendix Part 3 Number 14. Six items were removed because they failed to discriminate between NP and non-NP wards:

- "Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients ?"
- "Are nursing observations made of the patient's physical state ?"
- "Are nursing observations made of the patient's psychological state ?"
- "Are nursing observations made of the patient's social and economic state ?"
- "Are other information sources used in assessment e.g. medical notes or district nurses' notes ?"
- "Are the goals always realistic ?"

Subjects are required to respond to each of the remaining 37 items by ticking one of six boxes:

- yes, always/excellent ☐ (score 6)
- yes, usually/good ☐ (score 5)
- yes, often/fair ☐ (score 4)
- sometimes/poor ☐ (score 3)
- don't know ☐ (score 2)
- no, never ☐ (score 1)

The revised scale is designed for use in general hospital wards as a self-completion scale for ward based qualified nurses and second and third year learners. It takes about ten minutes to complete and may be administered individually or in groups. It is very simple to administer, to complete and to score. The front sheet contains directions for use and subjects are asked for information concerning length of time worked on

the ward, grade, educational qualifications and nursing and other professional qualifications. Each item is scored from 1 to 6 with 0 score for blanks. This produces a cumulative score from 0 to 222. Subtotals for assessment (8 items), planning, (9 items), implementation (10 items), evaluation (6 items) and general points (4 items) can be calculated.

13.2.2 Ward observation scale

A copy of the final version of the revised scale is at Appendix Part 3, Number 15. It is based on the same 37 items as the nurses' self-rating scale, has the same six point response scale and produces the same range of cumulative and subtotal scores. The revised scale is designed for use in general hospital wards by non-participant registered nurse observers. It has high inter-rater reliability and may therefore be completed by a single observer. Observations should take place over two consecutive midweek days, a late shift followed by an early shift, so that all patients' waking hours are sampled and night nurses are seen morning and evening. Although fairly complex to use and score, it has been used accurately by graduate and undergraduate nurses working from the written instructions for use on the front sheet.

13.2.3 Senior nurses' ward rating scale

No changes were made to this scale except to rename it as above. A copy is at Appendix Part 3 Number 9. The scale contains directions for use. Subjects assess the extent to which the ward is successfully carrying out each of five aspects of NP use (general points, assessment, planning, implementation and evaluation) by rating them on a scale from excellent (5) to not at all (1). It is a one page self-completion scale designed to be completed by a nurse manager in direct contact with the ward. The form takes only a minute or two to complete and is simple to score. A cumulative score from 5 to 25 is produced.

13.2.4 Instructions for use of the scale

The NP measuring scale may be used to quantify the use of NP in general hospital wards. To obtain comprehensive and valid data the following procedure should be employed. A registered nurse who is familiar with the ward observation scale should spend a late shift followed by the next early shift on the ward collecting information. Typical midweek days should be selected, preferably when sister or CN is on duty. All qualified nurses and second and third year learners on duty during the two days should be asked to complete ward nurses' self-rating scales. Ideally, group testing should be carried out to obtain spontaneous and independent responses. During the two days one or more senior nurses in close contact with the ward should be asked to complete senior nurses' ward rating scales.

By using the principle of triangulation i.e. obtaining data about one problem from several different Sources, increased confidence may be placed in the findings. To obtain a rough estimate of the use of NP, any one or two of the three procedures could be used. However, senior nurses' ward ratings would produce the weakest data if used alone.

PART 4: DISCUSSION, FURTHER RESEARCH AND CONCLUSIONS

PART 4. CHAPTER 14GENERAL DISCUSSION

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PART 4. CHAPTER 14.

GENERAL DISCUSSION

This chapter attempts to integrate the various parts of the thesis. The relationship of the findings to the theoretical framework is summarised and the relationship of the findings to the hypotheses is examined. Finally, a number of recommendations for nursing practice, education and management are outlined, including further research uses for the scales developed in this study. .

The two major parts of the study are closely related. One of the main aims of the questionnaire survey was to examine the relationship of NP to attitudes and practices concerning patient and family participation in care. As no existing measures of NP use were found in the literature, it was necessary to develop a scale for use in the questionnaire survey which could discriminate among wards according to how fully NP was being used. This subsequently became a major part of the research. Methodological development of this sort is essential to advance research concerning patient and family participation in care.

14.1 RELATIONSHIP OF FINDINGS TO THEORETICAL FRAMEWORK

A model illustrating the components and inter-relationships of the conceptual framework for this study is at Figure 4.5 (page 116.a).

The survey findings confirm that being in hospital is stressful for patients and relatives. The importance of demographic and personality variables in response to patient and relative control are emphasised by the study. Unlike most of the psychological experiments on control this study differentiates the characteristics of subjects who do and do not want control and identifies circumstances in which control may not be preferred i.e. in highly complex tasks and at times of stress. The survey confirms the findings from medical sociology that the traditionally passive, acquiescent patient role is still accepted by some patients and still expected and preferred by many nurses. However, this study shows that patients' and relatives' roles are modified by factors such as social class, education, knowledge of the condition, age, anxiety, and familiarity with the hospital environment. The widely discussed consumer movement had limited impact on these patients and relatives, some of whom appeared willing to accept the subservient role which they believed was required of them. The study confirms the importance of patient education as the basis for informed participation in decision making and self-care. Attitudes of staff were found to be similar to those found in previous American work. Family participation in care was found to be minimal. The difficulties in

obtaining data from relatives help to explain the general paucity of research on patients' relatives. The findings provide indirect support for Orem's notion that nurses compensate for self-care deficits. The findings add to Orem's theory in elucidating the causes of self-care deficits, which are associated with psychological and organisational factors rather than just patients' pathology.

The NP measuring scale is an addition to the literature on evaluating care as it measures an aspect of the process of care. The scale has the potential to contribute to an evaluation of the effects of NP. The development of the scale provided data about the nature of NP as a theoretical construct and its components. Other data concerning NP add to understanding of nurses' attitudes and to the developmental sequence of introducing NP into clinical practice.

In summary this study has tested nursing, psychological and sociological theory and has provided data which may be used to refine, develop and restate some of the relevant theoretical constructs.

14.2 RELATIONSHIP OF FINDINGS TO HYPOTHESES

Development of the NP scale was a methodological and exploratory study and therefore did not test hypotheses. The hypotheses of the questionnaire survey are listed below: .

Hypothesis 1. Patients and their families currently have very little involvement in the assessment, planning and implementation of their nursing care.

This was broadly supported. Although nurses claimed to allow and encourage patient and family participation, patients and relatives reported that they actually did very little. Patients reported higher levels of current participation than relatives. At least half the relatives carried out no care for patients. For both patients and relatives, high levels of current involvement were associated with greater knowledge of the illness and treatment and more previous hospital experience.

Hypothesis 2. Patients and relatives who express favourable attitudes towards the issue of participation and who desire increased participation will tend to be young, well educated, middle class and not anxious.

This was broadly supported. Both groups generally wanted more participation but relatives expressed a more positive attitude towards participation and a greater wish for increased participation than patients. Patients and relatives who most wanted increased participation tended to be those who already experienced the most actual participation. Patients and relatives with most positive attitudes tended to have most previous hospital experience, more qualifications and higher social class. Part of this hypothesis was not supported in that favourable attitudes and a desire for increased participation tended to be associated with older age group and greater anxiety, although these findings were equivocal.

Hypothesis 3. Patients in wards using NP will perceive themselves as more involved in their care than those in wards not using NP and will express more positive attitudes towards patient and family participation.

The use of NP had a negligible effect on patients' perceived participation and attitudes towards participation. The only weak support for this hypothesis was that patients in NP wards expressed (non significantly) more positive attitudes on one of four attitude subscales, that is more positive attitudes towards patient participation in the planning of care.

Hypothesis 4. Nurses working in wards using NP will express more positive attitudes towards patient and family participation than nurses working in wards not using NP.

The use of NP on wards had negligible effects on nurses' attitudes. The only weak support for this hypothesis was that nurses working in NP wards expressed (non significantly) more positive attitudes on one of the four attitude subscales, that is more positive attitudes towards patient participation in the implementation of care.

Hypothesis 5. Nurses who express positive attitudes towards patient and family participation in care will tend to hold favourable attitudes towards NP, be more senior and better educated.

Positive attitudes towards patient and family participation in care and towards NP tended to be associated. Nurses who were familiar with and held favourable attitudes towards NP tended to be older, better qualified and in more senior posts.

Hypothesis 6. Wards and units do not have official policies concerned with patient and family participation in nursing. Nurses in training are not taught about these issues.

This was strongly supported. No formal or informal ward or unit policies were identified and practices varied according to nurses' personal opinions. Responses indicated that little attention was given to patient and family participation in nurse training, either in the school of nursing or during ward teaching. Most qualified nurses had no knowledge of what learners were taught.

14.3 PRACTICAL IMPLICATIONS OF THE RESEARCH

The survey was carried out in only two hospitals, both in London and had a small sample. Therefore, the results have limited generalisability and recommendations for practice are made with caution. Problems associated with using self-completion questionnaires to explore complex abstract issues have already been identified and further limit the validity and generalisability of the findings.

On the basis of the survey findings it is possible to recommend that nurses need more knowledge about the nature and potential psychological

and practical benefits of patient and family participation in care. More attention should be given to these issues during pre- and post-registration nursing education. Sisters/CNs and nurse managers should consider whether to formulate ward or unit policies in relation to these issues, which would be preferable to practice based on nurses' personal views.

Not all patients and relatives want to share in decision-making or engage in self-care and a passive role may be preferred by some. Nevertheless, many patients and relatives are dissatisfied with the amount of involvement in care currently permitted and would welcome an increase. Patients should be allowed to choose the extent to which they wish to share in decision-making and participate in care giving. They should also be given a choice about the extent to which they wish their relatives to be involved. Patients' preferences may change during their admission as they become familiar with the environment and learn more about their condition. Consequently, patients' wishes concerning participation should be reviewed every few days. In the case of helpless patients, their relatives should be offered the same choices, but whenever possible the wishes of patients should be of paramount importance.

Familiarity with the hospital environment and knowledge about the condition were found to be important determinants of patient and family participation. Familiarity with the environment could be enhanced by making hospitals more accessible to people, with pre-admission visits, open days, organised tours etc. Patient education and information giving should be seen as an important part of the nurse's role, to provide the basis for informed decision-making. Information booklets should be available to supplement verbal information. Teaching should include practical care skills, particularly for patients with chronic disorders who require continuing care after discharge.

The scales developed for the survey will be useful for further research, particularly the Likert scale to measure the attitudes of nurses, patients and relatives to patient and family participation in care planning and care giving. One or more of the four subscales could be used alone. The scale to measure nurses' attitudes towards NP may also be useful for further research.

The NP measuring scale can be used in any further research in which it is necessary to discriminate among wards according to how much NP is being used. This is an important first step in developing methods to evaluate the efficacy of NP.

The NP measuring scale could also be used by nurse managers as an

auditing tool and by clinical nurses concerned to examine their own practices in relation to NP. It may have some value as a guide to the implementation of NP and may be used by nurse tutors in teaching about the components of NP. Although the scale was designed for use with all patients in a ward, it could readily be modified for use with individual patients or small groups and for use in community nursing. As the principles of NP are identical in all clinical areas, the scale could be easily adapted for use with the mentally ill, mentally handicapped, chronic sick, elderly and other patient groups.

PART 4 CHAPTER 15RECOMMENDATIONS FOR FURTHER RESEARCH

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RECOMMENDATIONS FOR FURTHER RESEARCH

This chapter contains recommendations for further research concerning patient and family participation in care and research on nursing process. The last part of the chapter consists of an outline proposal for a study to examine the effects of increased patient control at all stages of the nursing process.

15.1 RESEARCH ON PATIENT AND FAMILY PARTICIPATION IN CARE

Knowledge about the illness and treatment was found to be an important determinant of patient and family participation. It would therefore be interesting to study the effects of an educational intervention designed to give patients and relatives the knowledge necessary to make an active contribution to care. Previous hospital experience also promoted an active role and could be enhanced by pre-admission visits and hospital open-days for local people. Interventions to promote patient and family participation could be evaluated in an experimental study. Dependent variables could include amount of participation and attitudes to participation. These could be measured by observations of self-care or relative-care activities, number of questions asked, amount of information sought and the self-completion scales used in this study. Measures of recovery, emotional welfare and satisfaction could be included.

The scales used in this study could be modified for use with other patient populations. Groups of patients for whom very different patterns of results would be predicted include: private patients in acute settings; patients at home in the care of community nurses; people with chronic physical handicaps in long-term care; psychiatric patients in therapeutic communities; institutionalised psychiatric patients in long-stay wards and people in residential and community mental handicap care. Nurses in these settings might also be expected to express different attitudes and opinions from the nurses in this study.

It would be useful to analyse nurse-patient and nurse-relative communication patterns to explore at a micro-level how authority, control and power are established and sustained in nurse-patient-relative relationships and how individual differences manifest themselves. Macleod Clark (1983) collected audio and video-tape recordings of nurse-patient interactions which could be re-analysed in terms of patient control, although they may now be somewhat outdated.

The study raised several important questions which may best be examined using a qualitative approach, such as semi-structured interviews. For example, why nurses' seniority or age should be such an important determinant of attitudes towards patient and family participation; whether exerting control helps nurses to cope with stress; how patients and relatives feel about their enforced passivity; and what strategies patients and relatives use to negotiate a more active role and/or information.

Patient self-care and relative-care in hospital should be further researched before widespread policies can be recommended. There is currently only limited information about the abilities of patients and relatives to monitor and record clinical observations safely and accurately and their willingness to do so. Patients and relatives could readily be taught to maintain fluid balance charts, measure temperature, record weight and bowel actions, etc. Many simple nursing treatments could be carried out by patients and relatives in suitable circumstances, such as drug administration, injections, instilling ear and eye drops, and inserting suppositories. Simple methods of teaching these procedures could be devised and tested, after which compliance, clinical efficacy, accuracy, patient and relative acceptance, satisfaction and stress levels could be evaluated. These developments would be particularly beneficial for the many patients with chronic disorders who require observations and treatment at home after discharge.

Apart from these clinical and educational studies other areas should be explored. The economic and organisational effects of patient and family participation in hospital and community care could be evaluated. Historical studies of self-care and relative-care would be interesting in the context of the assertion that communities were more self-reliant before the relatively recent medical takeover of most aspects of life (Illich, 1975). Anthropological studies show that some cultures are more active or more passive in their illness behaviour. As Britain is a multi-cultural society it is important to understand the reasons for and significance of these cultural patterns, so that the needs of all ethnic groups can be met. Finally, studies of the roles of health professionals in relation to patient and family participation are much needed. Professional fear and self-interest may block developments that could be beneficial for consumers. Professional attitudes and methods of changing attitudes need to be studied. The potential contribution of nurses to patient and family education and disease prevention needs to be explored and nurses need to learn how to work in partnership with patients and their families.

15.2 RESEARCH ON NURSING PROCESS

The most important recommendation is for research to evaluate the effects of NP. The literature review showed that very little work has been done, presumably because of the considerable methodological difficulties. The NP scale will facilitate such work by making it possible to determine whether or not NP is being used. Because of the problems associated with global evaluation, a better approach may be to evaluate the effects of specific parts of NP. Already there are studies comparing the number and type of nursing problems identifiable from systematic nursing histories and the standard Kardex (Hefferin and Hunter, 1975; Tissier, 1984). It would be feasible to examine the effects of listing patient problems, formulating nursing diagnoses, identifying overall aims of care, identifying long and short-term problem-oriented goals and systematic evaluation of care.

The review of the literature on NP and evaluation of care (summarised at Section 4.5.3) showed that less attention has been given to the goal setting and evaluation stages of NP than other stages. This was confirmed by the sequence of development of NP identified in several hospitals in this study. There is currently a lack of knowledge about the relationship between nursing actions and outcomes, which makes impossible the formulation of meaningful patient goals. Evaluation of care is also hindered by a paucity of well-validated, reliable methods of measuring the effects of specific nursing actions. Such research is currently the subject of a DHSS funded project (Openshaw, 1985, personal communication), but much more work is needed. Carefully completed care plans could provide valuable data to elucidate relationships between structure, process and outcome with reference to particular nursing activities.

Little is known about whether nurses have the skills necessary to use NP effectively. For example, patient assessment requires complex skills in interviewing, observing, inferring from data, etc. If nurses' educational needs are not met they will be unable to use NP properly. More research on skills analysis and associated educational innovation is needed.

This study showed that nurses' major complaint about NP was the amount of paperwork it generated, much of which seemed irrelevant or repetitive. NP documentation needs to be critically examined and simple, logical, relevant forms should be developed and evaluated. There was little evidence that assessment forms were specific to the needs of particular patient groups and only one study was found in which an

assessment form had been developed and tested as a research exercise (Tissier, 1984). More such work is essential. The use of standard care plans to supplement individualised care plans (e.g. for routine pre-operative preparation) should be explored as potentially time-saving devices.

The assertion that NP is likely to generate stress for nurses needs further exploration and methods of reducing or avoiding stress need to be developed. The effects of NP on relationships within the multi-disciplinary team is another area of possible difficulty, especially in psychiatry where there may be deliberate blurring of professional boundaries. Causes of conflict need to be identified and solutions sought. Methods of collaboration among team members is also important to avoid duplication of effort, most obviously in relation to patient assessment.

Finally, little is known about the use and appropriateness of NP in specialised areas such as community care, psychiatry and mental handicap. Literature reviews would help to identify research needs that are specific to particular patient groups.

15.3 OUTLINE OF A PROPOSAL FOR A FIELD EXPERIMENT

Plans for a study to evaluate the effects of increased patient control at all stages of the nursing process are at a fairly advanced stage of development, based on the following summary proposal:

15.3.1 Reasons for the study

An outline proposal is included here as one example of a logical direction for research in this area. It is claimed that surveys are useful in developing hypotheses which may be tested experimentally (Kerlinger, 1973), which the proposed study does. It also draws on the literature review and utilises the methodological work on the NP scale and the attitude scale.

The literature review (summarised at Section 4.5) showed that control over aversive events may reduce stress. Relevant personality variables include locus of control, self-efficacy, reactance and helplessness, although relationships between them and the exercise of control is relatively unexplored. The traditionally passive patient role is being challenged by the consumer movement promoting self-help and participation at all levels. The few studies concerning active patient involvement in hospitals found that involvement enhanced recovery and the effectiveness of procedures. Research on pre-operative and pre-procedural information-giving may also be conceptualised as increasing control.

Results of the survey are summarised at Section 8.1. Briefly, it was found that patients currently participate little in care planning and care giving, but indicated that they would like more participation. Generally, patients who participated most or had most positive attitudes towards participation differed from others in having more previous hospital experience, more knowledge of their illness and treatment, more educational and professional qualifications, and were of higher social class, older and more anxious.

In view of the consistently beneficial effects of increasing personal control identified in the literature review, it is surprising that there have been no studies in Britain or the USA which directly examined patient control in nursing. The survey finding that patients have little participation, but would like more, further emphasises the need for such research, which would add to knowledge and guide practice.

The literature and the findings showed that NP is rapidly developing in Britain and is widely regarded as the framework around which care should be organised. It is therefore appropriate that nursing practice research should be carried out in the context of NP.

15.3.2 The aims of the study are:

- (1) to evaluate the effects of increased control at all stages of NP for ten days in a sample of patients in medical wards, on a variety of outcome measures including locus of control, self-efficacy, anxiety and other mood states, satisfaction with care, attitudes to patient participation in care, perceptions of actual participation, self-care performance, information-seeking, knowledge of illness and care and changes in health status, including attainment of nursing goals; and
- (2) to investigate interactions between amount of patient control and relevant personality and demographic characteristics i.e. preferences for information and participation, attitudes to participation, mood, neuroticism, self-efficacy, locus of control, knowledge of illness and care, previous hospital experience, nationality, educational and professional qualifications, social class, marital status, age and sex.

15.3.3 The hypotheses of the study are that:

- (1) patients in medical wards who are given increased control at all stages of NP for ten days will have a more internal locus of control, higher self-efficacy, decreased anxiety, improved mood, increased satisfaction with care, more positive attitudes to patient

participation in care, perceive more actual participation, engage in more self-care activities, seek more information, have more knowledge of the illness and care and show more improvements in health status, including better attainment of nursing goals than medical ward patients with normal amounts of control over their care; and

- (2) patients who have increased control and respond most positively on the above outcome measures will express preferences for more information and participation, have more positive attitudes to participation, be more anxious and more neurotic, have a higher self-efficacy and internal locus of control, be more knowledgeable about their illness and care, have more previous hospital experience, be of caucasian race, have more educational and professional qualifications, be of higher social class, and older than patients who have increased control but respond least positively on the outcome measures.

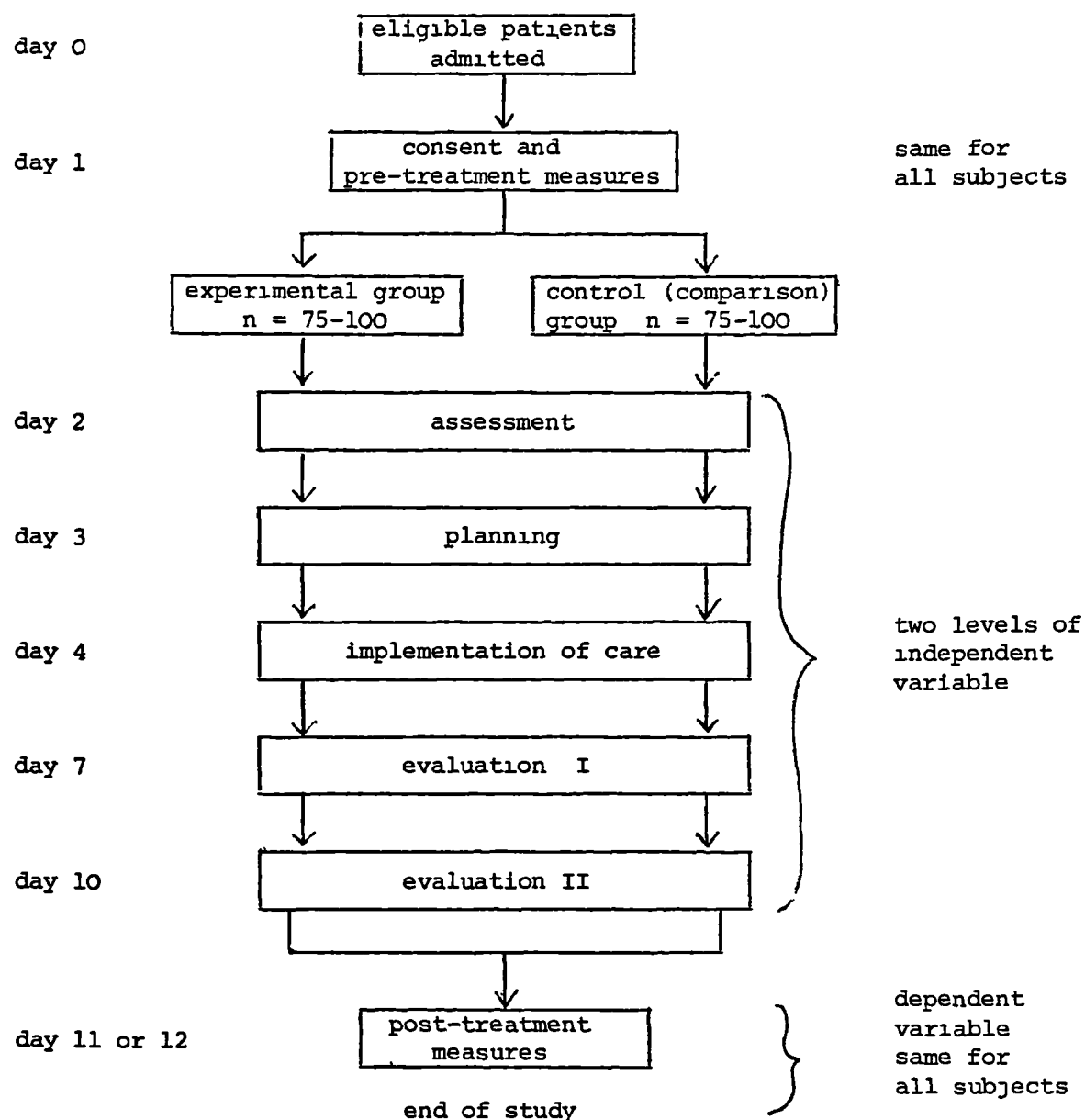
15.3.4 Design

Several types of experimental and quasi-experimental designs have been described (Alexander, 1981; Campbell and Stanley, 1963). The pretest-post test control design permits causal inferences with the minimum number of subjects and is suitable for this study. It provides controls for internal validity and can be extended to include several variations of the independent variable.

The experimental manipulation could be carried out by researchers or ward nurses . Ideally clinical experiments should approximate closely to reality if results are to be generalisable (Kerlinger, 1973), but adequate control is essential if the results are to be valid and reliable. As this is the first study in this area, it was decided that the experimental manipulation should be carried out by researchers to permit standardisation of the procedure.

Figure 15.1 (See overleaf - p. 406)

Figure 15.2 (See overleaf - p. 406)

Figure 15.1Summary of proposed experimental designFigure 15.2Summary of cross-over design for data collection to ensure "blind" post-treatment measures to reduce experimenter bias

| procedure | first half of data collection | second half of data collection |
|------------------------------------------------------|-------------------------------|--------------------------------|
| pre-treatment measures | A | B |
| experimental intervention (independent variable) | B | A |
| post-treatment measures | A | B |

15.3.5 Preliminary work, study setting and subjects

Training for the two research assistants will include establishing high inter-rater reliability on all instruments. All aspects of the procedure will be pilot tested on a sample about 10% of the total sample size.

The main study will be carried out in one large general hospital in London. Data will be collected in about four to eight medical wards which are using NP, as confirmed by their scores on the NP scale. Subjects will be 150 to 200 newly admitted adults suffering from sub-acute or chronic medical disorders. Detailed criteria for inclusion will be specified. A large sample is necessary to allow for some attrition, to ensure that extraneous variables are randomly distributed and to permit analysis of interactions between patient control and other personality and demographic variables. Eligible patients who agree to participate will be randomly assigned to experimental or comparison groups.

15.3.6 Intervening variables

Several demographic characteristics and personality variables shown to be relevant in the literature and questionnaire survey will be incorporated into the research and their interaction with increased patient control will be analysed. These pre-treatment measures will be taken the day after admission.

Demographic data will be obtained from the patient's notes or from interview and will include:

- sex;
- age;
- marital status;
- patient's occupation and spouse's occupation (as measures of social class);
- educational qualifications;
- professional and technical qualifications;
- nationality;
- number of previous admissions; and
- knowledge of diagnosis, tests, treatment, nursing assessment, problems, goals, care, and evaluation.

Pre-treatment measures of personality and mood will consist of standardised self-completion scales with acceptable validity and reliability. These will include measures of:

- locus of control (Lau and Ware, 1981; Wallston et al, 1978);
- self-efficacy (Bandura, 1977);
- neuroticism (Eysenck and Eysenck, 1964)

- mood (Mood Adjective Check List, Lishman, 1972)
- attitudes to patient participation in care; and
- preferences for different treatment approaches (Krantz Health Opinion Survey, Krantz et al, 1980).

15.3.7 Independent variables

The independent variable is patient control at all stages of NP. The experimental group will have enhanced control and the comparison group will have the normal amount of control given to patients. In the literature control has been operationalised as choice, information, prediction and self-administration of aversive stimuli. This diversity is reflected in the various ways that control is operationalised in this study.

15.3.7.1 Assessment

The experimental group will be told about NP and given written information. They will be given a communication emphasising their responsibility for themselves, their freedom to make choices and the importance of getting information by asking questions. Their personal rights and individuality will be emphasised. A nursing assessment interview will be carried out and recorded on the hospital's standard form. The patient will be encouraged to look at the form as it is completed. The researcher and patient will jointly identify nursing problems, which the patient will arrange in priority order. The researcher will invite questions throughout.

The comparison group will be given a communication emphasising the nurses' responsibility for them, the importance of ward routine, the needs of the whole ward and that nurses will advise them about the timing of activities, e.g. bathing. The nursing assessment interview will be identical to the experimental group except that the form will not be shown to the patient. Some time will be spent in general conversation about the patient's family, hobbies, etc. to equalise the time spent with patients in the two groups. The researcher will answer questions, but will not encourage questioning. Away from the patient, the researcher will identify problems and arrange them in priority order.

15.3.7.2 Planning

For the experimental group the researcher and the patient will jointly identify problem-oriented goals and set times for goal attainments. They will jointly plan the care required to achieve the goals and technical aspects of care will be fully explained.

Patients in the comparison group will be visited for the same length of time for a general discussion. Goals will be formulated and

required care prescribed in the same detail as for the experimental group, but away from the patient.

5.3.7.3 Implementation of care

Patients in the experimental group will be asked if they wish to learn to carry out one or two simple care procedures for themselves. They will be reminded of the potential benefit of this skill when they return home. It is important that patients choose whether or not to participate and choose which procedure(s) to learn by selecting from a list of "approved" activities. If patients agree, they will receive training, then practice under supervision. Ward staff will be informed that the patient wishes to carry out that procedure and is safe to do so.

Patients in the comparison group will be visited for the same length of time for a general conversation.

5.3.7.4 Evaluation

Patients in both groups will be visited twice to evaluate progress and modify care plans accordingly. Patients in the experimental group will be asked to assess their progress towards each goal. Changes to care plans will be made by mutual consent with patients' full understanding and agreement.

Evaluation interviews for patients in the comparison group will be structured as direct questions, which will not be explained to patients unless they ask. Changes to care plans will be made away from the patient.

Figure 15.3 Summary of timing of interventions and measures

| Day | Activity | Predicted timing |
|----------|------------------------------------|------------------|
| 0 | admission to hospital | N/A |
| 1 | consent and pre-treatment measures | 45-60 minutes |
| 2 | assessment | 45-60 minutes |
| 3 | planning | 30 minutes |
| 4 | implementation of care | 30 minutes |
| 5 | --- | - |
| 6 | --- | - |
| 7 | evaluation I | 15-30 minutes |
| 8 | --- | - |
| 9 | --- | - |
| 10 | evaluation II | 15-30 minutes |
| 11 or 12 | outcome measures | 45-60 minutes |

15.3.8 Dependent variables

The dependent variables (outcome measures) will consist of:

Patient's emotional state and personality:

- health locus of control
 - self-efficacy scale
 - mood adjective check list
 - satisfaction with nursing care (Catalan et al, 1980)
- pre-treatment
measures repeated

Attitudes to patient participation in care:

- health opinion survey (Krantz et al, 1980)
 - attitudes to patient participation in care scale
- pre-treatment
measures repeated

Actual control over care (operationalised as perception of participation, self-care performance, information seeking and knowledge obtained):

- modified care activities in hospital scale
- involvement in care during this stay in hospital scale
- perceived situational control of daily activities in an institutional setting (Chang, 1978)
- patient's knowledge of diagnosis, tests, treatment, nursing assessment, problems, goals, care prescribed and evaluation - pre-treatment questions repeated
- number of questions asked/information sought - will be recorded each time researcher sees patient
- amount of self-care performed - from nursing care plans and direct observation (if feasible)

Changes in health status:

- evaluation of effectiveness of care given in terms of goal attainment from care plan and patient's ratings (patients' problems will differ but may commonly include pain, immobility, anorexia, incontinence, pressure sores, constipation, etc. Preliminary work will include identifying the 20 or so most common nursing problems in this patient population and devising standard methods of measuring progress, e.g. pain "thermometers", pressure sore risk calculator (Norton et al, 1975), amount eaten, etc.)
- date of discharge - from medical records

Ratings by ward sister/CN and the two nurses who most frequently looked after the patient

- questions asked/information sought by patient - more, less or same as average
- amount of self-care performed
- overall progress in health status
- satisfaction with nursing the patient

All patients' care plans will be reviewed at the end of data collection to check that there were no systematic differences in care planned or given to the patients in the experimental and comparison groups.

CONCLUSIONS

The first part of the study was a survey of 114 patients, 72 relatives and 107 nurses, in two London hospitals, which examined current practices, opinions and attitudes in relation to patient and family participation in nursing. The study originated from observations of patient passivity during clinical practice and derived its theoretical framework from work in nursing, psychology, sociology and philosophy. Literature on the psychology of personal control and health care consumerism were most influential.

Despite the limitations of self-completion questionnaires, the method achieved the overall aims of the study and provided evidence in relation to the hypotheses. The main findings were as follows:

1. Patients and relatives reported little participation in planning and giving care and wanted increased participation.
2. Patients and relatives who held most positive attitudes and reported the highest levels of participation tended to be knowledgeable about the patient's condition and treatment and familiar with hospitals.
3. Relatives expressed more positive attitudes towards patient and family participation in care than patients.
4. Patients and relatives who most wanted increased participation were those who already had the greatest participation.
5. The use or lack of use of NP had negligible effects on practices and attitudes in relation to patient and family participation.
6. Nurses expressed generally positive attitudes towards patient and family participation in care and obtained higher attitude scores than patients or relatives.
7. Nurses expressed generally positive attitudes towards NP except for complaints about the quantity of paperwork associated with it.
8. Nurses who had most positive attitudes towards NP and towards patient and family participation in care tended to be older and in more senior positions.
9. Many nurses claimed to organise care to facilitate patient and family participation, but there was little actual evidence of this. Patients and relatives claimed to have much less participation in care than nurses indicated they provided.
10. None of the wards or units had formal or informal policies about patient and family participation.

11. Nurses reported that little was taught during training about patient and family participation, either in wards or school of nursing.

As part of the survey, a Likert scale was developed to measure attitudes of nurses, patients and relatives to patient and family participation in care. The scale attained reasonable levels of reliability as measured by internal homogeneity. There were consistently high positive correlations among the four subscales and among most other major scales used in the survey. This suggests that attitudes towards patient and family participation in care planning and care giving may form a homogeneous cluster.

A scale was developed to measure nurses' attitudes towards NP. This achieved very high reliability as measured by inter-item correlations.

The major outcome of the survey is to emphasise the importance of individual differences in patients' and relatives' responses to participation. Although it appears that patients and relatives currently have too little opportunity to participate in care giving and care planning if they wish, it would be unreasonable to generalise about beneficial effects of increased participation. Some patients and relatives, particularly uneducated working class people, clearly indicated negative attitudes towards participation which may be difficult and therefore stressful for them. The consumer movement has been criticised as appealing mainly to the articulate professional classes and similarly much psychological research on personal control has used well-educated, middle class undergraduates as subjects. Thus it can be seen that proposals to increase patient and family participation in care have been derived from unrepresentative subject groups and may not be universally applicable. It would however be reasonable to allow patients and relatives more choice about the extent of their participation in care.

The second part of the study consisted of developing and testing a scale to measure the use of NP in general hospital wards. The scale was initially derived from the literature and content validity was established from the ratings of a panel of experts. Methods of data collection, validity, reliability and sensitivity were tested in eight wards in one hospital, including two month and 18 month follow-up studies. The completed scale can be used in three ways: as a self-rating scale for ward nurses; as a non-participant observer's ward rating scale; and as a senior nurses' ward rating scale.

Face, content and concurrent criterion-related validity were found to be high and the scale has some construct validity, although this was not examined comprehensively. Test-retest, scorer and split-half

reliability were found to be high. The sensitivity of the scale has not been fully established because no wards were tested that claimed to be using NP fully. The instrument is precise, discrete, readily understood, meaningful and comprehensive.

The scale was designed to produce ordinal level measurement, because of the complexity of producing an interval scale. As more data accumulates, it will nevertheless be possible to assign broad categories of meaning to particular ranges of scores.

The scale was initially designed for use in the questionnaire survey. Its main value is as a research tool to discriminate among wards according to how fully NP is being used. Because it measures an aspect of the process of care, but not outcomes, it is not possible to infer quality of care on the basis of the results. This scale represents a first step in developing methods to evaluate the effectiveness of NP.

Data from the methodological study and survey revealed consistent patterns in the development of NP use. Typically, assessment developed first, followed by problem identification and planning interventions. Goal setting and evaluation were invariably the last aspects of NP use to be developed and no wards were found in which goal setting or evaluation were fully developed.

The thesis closed with recommendations for further research. This included a proposal for a field experiment to examine the effects of increasing patient control at all stages of the NP.

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APPENDICES TO PART 2.

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01-351-2488 Ext. 550

Dear Nurse,

I am a nurse studying the views of patients, nurses and relatives towards aspects of nursing care in hospitals. I hope very much that the results of this work will help our understanding of patient care.

I am looking for a random cross-section of nurses, and your name has been chosen by chance. I would be most grateful if you would fill in the enclosed questionnaire as soon as possible. Your name is not required and all information will be treated in strict confidence. I have no official connection with this hospital or ward.

Please remember that it is your opinion that I am interested in. It would be best if you would fill out the entire questionnaire without discussing it with anyone. Please try to answer the questions as frankly and openly as you can. There are no right or wrong answers. If you cannot answer a particular question, just write "Don't know".

Thank you for your valuable contribution to this work. I shall see you again in a couple of days, as arranged, to collect your completed forms. If you have any questions, please ask me when I see you again.

Yours sincerely,

Julia Brooking

(Mrs) J.I.Brooking, BSc(Hons) SRN. RMN. DipN(Lond)
Nurse Researcher

Chelsea College

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488 Ext. 550

Dear Patient,

I am a nurse studying the views of patients, nurses and relatives towards aspects of nursing care in hospitals. I hope very much that the results of this work will help our understanding of patient care.

I am looking for a random cross-section of patients, and your name has been chosen by chance. I would be most grateful if you would fill in the enclosed questionnaire as soon as possible. Your name is not required and all information will be treated in strict confidence. I have no official connection with this hospital or ward.

Please remember that it is your opinion that I am interested in. It would be best if you would fill out the entire form without discussing the questions with anyone, not even your relatives. Please try to answer the questions as frankly and openly as you can. There are no right or wrong answers. If you cannot answer a particular question, just write "Don't know".

You will see that I have enclosed another slightly different form to be filled in by your nearest adult relative or friend. This is because I am interested in the views of relatives as well as patients. Please ask him or her to complete the form next time they visit, and to leave the completed form with you. I shall come to the ward again in a couple of days to collect the forms from you.

Thank you for your valuable contribution to this work. If you have any questions, please ask me when I come to see you again.

Yours sincerely,

Julia Brooking

(Mrs) J.I. Brooking, BSc. SRN. RMN. Dip.N(Lond)

Nurse Researcher

Chelsea College

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488 Ext.550

Dear Relative,

I am a nurse studying the views of patients, nurses and relatives towards aspects of nursing care in hospitals. I hope very much that the results of this work will help our understanding of patient care.

The member of your family who is a patient in this hospital has been asked to participate in this study completely by chance. I am simply looking for a random cross-section of patients. As I am also interested in the opinions of patient's relatives, I would be most grateful if you could fill in the enclosed questionnaire as soon as possible. Your name is not required and all information will be treated in strict confidence. I have no official connection with this hospital or ward.

Please remember that it is your opinion that I am interested in. It would be best if you would fill in the entire form without discussing the questions with anyone, not even your relative. Please try to answer the questions as frankly and openly as you can. There are no right or wrong answers. If you cannot answer a particular question, just write "Don't know".

Could you please leave your completed form with the patient. I shall come to the ward again in a couple of days to collect the forms from your relative.

Thank you for your valuable contribution to this work. If you have any questions, please contact me at the address shown.

Yours sincerely,

Julia Brooking

(Mrs) J.I.Brooking, BSc. SRN. RMN. DipN(Lond)
Nurse Researcher

APPENDIX PART 2 NUMBER 2Original versions of general information pages of questionnairesPlease leave this
column blankNURSES' QUESTIONNAIRE

Code N _____

Some questions have boxes: ☐ Tick the one box which is
most appropriate for you.

Some questions have dotted lines: _____ Write your answer
on this.

FOR WARD-BASED NURSES ONLY:

How much time have you spent working on wards in which the nursing
process was used?

- None ☐
 Less than 2 months ☐
 2-6 months ☐
 7-12 months ☐
 More than a year ☐

FOR NURSING OFFICERS AND ABOVE ONLY:

How long have you been directly concerned with the nursing
process in your unit or area?

- Not at all ☐
 Less than 2 months ☐
 2-6 months ☐
 7-12 months ☐
 More than a year ☐

FOR ALL NURSES:

Have you read any books or articles about the nursing process?

- No ☐
 One or two ☐
 Three or more ☐

In your current position, are you encouraged to read about the
nursing process?

- No, not really ☐
 Yes, to a certain extent ☐
 Yes, very much ☐

Have you attended any lectures, study days, discussions or seminars
on the nursing process?

- No ☐
 Yes, one ☐
 Yes, several ☐

Please leave this
column blank

PATIENTS' QUESTIONNAIRE

Code P _____

Some questions have boxes: ☐ Tick the one box which is most appropriate for you.

Some questions have dotted lines: _____ Write your answer on this.

What tests and treatment are you having during your stay in hospital?

What are you suffering from?

How many times have you been a patient in hospital before? _____

Have you ever worked in a hospital? Yes ☐ No ☐

If yes, what was your job?

If yes, how long did you work in hospital(s)? _____

Please tick the box which best sums up how you felt about coming into hospital this time:

Not at all worried ☐

Slightly worried ☐

Moderately worried ☐

Very worried ☐

RELATIVES' QUESTIONNAIREPlease leave this
column blank

Some questions have boxes: ☐ Tick the one box which
is most appropriate for you.

Code R

Some questions have dotted lines: _ _ _ _ _ Write your
answer on this.

What tests and treatment is your relative having during his/her
stay in hospital? (If you have not been told, please state this.)

What is your relative suffering from? (If you have not been told,
please state this.)

How many times, if ever, have you been a patient in hospital?

Have you ever worked in a hospital? Yes ☐ No ☐

If yes, what was your job? -----

If yes, how long did you work in hospital(s)? -----

Please tick the box which best sums up how you felt about your
relative coming into hospital this time:

Not at all worried ☐

Slightly worried ☐

Moderately worried ☐

Very worried ☐

What is your relationship to the patient?

I am the patient's: husband/wife ☐

son/ daughter ☐

father/ mother ☐

brother/ sister ☐

uncle/aunt ☐

nephew/ niece ☐

other (please specify) -----

How long does the journey from your home to the hospital take each way?

Less than 30 minutes ☐ 30-60 minutes ☐ More than one hour ☐

ATTITUDES AND OPINIONS ABOUT THE BEHAVIOUR OF PATIENTS, RELATIVES
AND NURSES

In this section please tick whichever of the seven columns best describes your view of the previous statement. Remember there are no right or wrong answers. I am simply interested in your personal opinion.

| | Strongly disagree | Moderately disagree | Slightly disagree | Don't know | Slightly agree | Moderately agree | Strongly agree |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|-------------------|------------|----------------|------------------|----------------|
| 1. As they have no nursing training, relatives would be unwise to involve themselves in planning the patient's nursing care. | | | | | | | |
| 2. The risks involved in teaching relatives to feed handicapped children far outweigh any possible advantages. | | | | | | | |
| 3. The essence of nursing is doing things for people to enable them to rest and relax in hospital. | | | | | | | |
| 4. When a patient is first admitted, the nurse should ask him which of his problems and needs he regards as most important. | | | | | | | |
| 5. Relatives have a right to know what is being done to their "nearest and dearest" by the nursing staff. | | | | | | | |
| 6. When nurses are considering what is best for a particular patient, they should ask him what he prefers. | | | | | | | |
| 7. A male patient should have his face shaved by his wife only if there is no nurse available to do the job. | | | | | | | |
| 8. Information from a spouse about the patient's normal life style helps nurses to assess what care will be required. | | | | | | | |
| 9. If patients are well enough they should be allowed to keep their own medicines in their lockers and take them as prescribed. | | | | | | | |
| 10. Patients must accept that whilst in hospital they have no right to question nurses' decisions about what needs to be done to them. | | | | | | | |

11. Even if a diabetic regularly gives his own insulin injections at home, in hospital this should be done by the nurses.
12. Nurses should encourage patients to be as independent as possible.
13. Even if it would be quicker for a nurse to dress an elderly patient, she should try to encourage the old lady to do it herself.
14. It is unlikely that the patient's family can be a useful source of information for the nurse when she is trying to assess the patient's needs.
15. Patients who are well enough, should be allowed to write up their own charts of how much fluid they are drinking each day.
16. Before an operation, the implications and risks of surgery should be discussed with the patients' nearest relative.
17. Patients are entitled to do things for themselves as long as they feel well enough.
18. It is up to the nurses to assess how often patients need to wash their hair whilst in hospital.
19. When a diabetic man is admitted, his wife can give the nurses useful information about how she prepares his diet at home.
20. It is always the nurse's responsibility to decide on the most suitable time to renew a patient's bandage.
21. Relatives must accept that they are not entitled to do anything for the patient while he is the responsibility of the hospital.
22. If a patient has a skin disease, the nurse should apply the ointment to ensure that it is rubbed in properly.
23. As far as possible, patients should be allowed to decide for themselves when they want to wash and bath.

| Strongly disagree | Moderately disagree | Slightly disagree | Don't know | Slightly agree | Moderately agree | Strongly agree |
|-------------------|---------------------|-------------------|------------|----------------|------------------|----------------|
|-------------------|---------------------|-------------------|------------|----------------|------------------|----------------|

| | Strongly disagree | Moderately disagree | Slightly disagree | Don't know | Slightly agree | Moderately agree | Strongly agree |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|-------------------|------------|----------------|------------------|----------------|
| 24. It will only lead to problems for the nurses if relatives are allowed to do too much for the patient. | | | | | | | |
| 25. When an expectant mother goes into the maternity ward, she and the midwife must jointly decide what needs to be done during the birth. | | | | | | | |
| 26. If a patient is going to need care at home, the nurses should teach his wife how to look after him while he is still in hospital. | | | | | | | |
| 27. When a child is in hospital, his mother should be encouraged to wash and feed him, provided this is medically safe. | | | | | | | |
| 28. Relatives must accept that nurses have the training and experience to assess the patient's needs without interference from the family. | | | | | | | |
| 29. It is good for both patients and nurses if relatives can help with simple tasks like giving a patient a cup of tea. | | | | | | | |
| 30. When deciding on a suitable date for the discharge of an elderly patient, it is quite unnecessary to involve the patient's next-of-kin. | | | | | | | |
| 31. In planning a course of rehabilitation after a stroke, the nearest relatives should be invited to contribute their ideas. | | | | | | | |
| 32. Most patients are happy to hand over to the nurses total responsibility for deciding what care they require. | | | | | | | |

IF YOU FOUND DIFFICULTY IN ANSWERING ANY OF THESE QUESTIONS, PLEASE COMMENT BELOW:

No. of question

Comment

HOW YOU ORGANISE THE CARE OF YOUR PATIENTS

please leave
this column
blank

Please tick one column for each question. If you do not currently work in direct patient contact, please answer as you would if you were working on a ward.

| When I am caring for a patient: | Never | Sometimes | Often | Always | Don't know |
|------------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|------------|
| 1. I plan the nursing care without asking the patient's family what they think. | | | | | |
| 2. I tend to do everything for my patients, even if they could manage themselves. | | | | | |
| 3. I discourage the family from doing anything for the patient while he/she is in the care of the hospital. | | | | | |
| 4. I encourage the patient to express his/her views when decisions about his/her nursing care have to be made. | | | | | |
| 5. I encourage the relatives to help with the patient's nursing care in various ways. | | | | | |
| 6. I encourage my patients to be as independent as possible, and help themselves as far as their illness allows. | | | | | |
| 7. I try to consult the relatives when decisions about the patient's care have to be made. | | | | | |
| 8. I tend to decide what needs to be done for the patient without asking for his/her views. | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE OTHER SIDE OF THIS SHEET OF PAPER

Patients' QuestionnairePlease leave this
column blankYOUR INVOLVEMENT IN YOUR HOSPITAL CARE DURING YOUR PRESENT
STAY IN HOSPITAL

Please tick one column for each question

| | Never | Sometimes | Often | Always | Don't know |
|---------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|---------------|
| 1. How often were decisions made about your nursing care, without asking your family what they thought? | | | | | |
| 2. Did the nurses tend to do everything for you, even if you could have managed yourself? | | | | | |
| 3. How often did you feel that your relatives were left out of your care, when they would have liked to help? | | | | | |
| 4. How much were you encouraged to express your views when decisions about your nursing had to be made? | | | | | |
| 5. How often were your relatives allowed to help with your care in various ways? | | | | | |
| 6. Did the nurses encourage you to help yourself as far as your illness allowed? | | | | | |
| 7. How much were your relatives consulted by the nurses when decisions were being made about your care? | | | | | |
| 8. How often did the nurses decide what was to be done for you without asking for your views? | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Please leave the
column blank

Relatives' questionnaire

PATIENT AND FAMILY INVOLVEMENT IN HOSPITAL CARE DURING THE PRESENT
STAY IN HOSPITAL

please tick one column for each question

| | Never | Sometimes | Often | Always | Don't know |
|------------------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|------------|
| 1. How often were decisions made about your relative's nursing care, without asking the family what they thought? | | | | | |
| 2. Did the nurses tend to do everything for your relative, even if he/she could have managed? | | | | | |
| 3. How often did you feel that you were left out of your relative's care, when you would have liked to help? | | | | | |
| 4. How much was your relative encouraged to express his/her views when decisions about his/her nursing had to be made? | | | | | |
| 5. How often were you encouraged to help with the patient's care in various ways? | | | | | |
| 6. Did the nurses encourage your relative to help him/herself as far as the illness allowed? | | | | | |
| 7. How much were you consulted by the nurses when decisions were being made about the patient's care? | | | | | |
| 8. How often did the nurses decide what was to be done for the patient without asking for his/her views? | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Please leave this
column blank

Patients' questionnaire

HOW MUCH YOU WOULD IDEALLY LIKE TO BE INVOLVED IN YOUR HOSPITAL
CARE, IF YOU WERE A PATIENT AGAIN.

use tick one column for each question

| | Never | Sometimes | Often | Always | Don't Know |
|-------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|---------------|
| 1. I would like the nurses to do everything for me, so that I had very little to do for myself. | | | | | |
| 2. I would like to take part in discussions to plan my nursing care. | | | | | |
| 3. I would prefer my relatives not to do anything for me while I was in the care of the hospital. | | | | | |
| 4. I would like the nurses to decide on my care without bothering my relatives for their opinions. | | | | | |
| 5. I would like to be as independent as possible, and help myself as far as my illness allowed. | | | | | |
| 6. I would like the nurses to decide what was to be done for me without involving me in their discussions . | | | | | |
| 7. I would like my relatives to be able to help by doing simple nursing tasks for me. | | | | | |
| 8. I would like my relatives to have a say in the planning of my care. | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

HOW MUCH PATIENT AND FAMILY INVOLVEMENT IN HOSPITAL CARE YOU
WOULD IDEALLY LIKE

Please tick one column for each question

If my relative were ever a
patient in hospital again:

| Never | Sometimes | Often | Always | Don't know |
|-------|-----------|-------|--------|------------|
|-------|-----------|-------|--------|------------|

1. I would like the nurses to do everything for him/her, so that he/she had very little to do for him/herself.

2. I would like my relative to take part in all discussions to plan his/her nursing care.

3. I would prefer not to do anything for the patient while he/she was in the care of the hospital.

4. I would like the nurses to decide on my relative's care, without bothering me for my opinions.

5. I would like my relative to be as independent as possible, and help him/herself as far as the illness allowed.

6. I would like the nurses to plan my relative's care without involving him/her in their discussions.

7. I would like to be able to help my relative by doing simple nursing tasks for him/her.

8. I would like to have a say in the planning of my relative's care.

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Original versions of "Care activities in hospital" scalesNurses' Questionnaire

please leave this
column blank

CARE ACTIVITIES IN HOSPITAL

Below is a list of some activities which may be required by patients. Please decide whether, in your opinion, each activity could be carried out by a nurse, the patient himself or the patient's relative. Tick at least one column for each item. However, you may tick several columns if more than one answer seems to be appropriate.

The following activities could be done by:

| Nurse | Patient | Relative | Don't know |
|-------|---------|----------|------------|
|-------|---------|----------|------------|

| | | | | |
|----------------------------------------------|--|--|--|--|
| 1. Filling in the fluid chart | | | | |
| 2. Applying ointment to the patient's skin | | | | |
| 3. Dressing or undressing the patient | | | | |
| 4. Cleaning the patient's teeth or mouth | | | | |
| 5. Bringing or removing bedpan or bottle | | | | |
| 6. Taking the pulse | | | | |
| 7. Helping the patient to eat or drink | | | | |
| 8. Brushing the patient's hair | | | | |
| 9. Helping the patient to walk to the toilet | | | | |
| 10. Testing the urine | | | | |
| 11. Giving an injection | | | | |
| 12. Rubbing the patient's back or bottom | | | | |
| 13. Giving a suppository | | | | |
| 14. Tidying the bedclothes or pillows | | | | |
| 15. Washing the patient in bed | | | | |
| 16. Helping the patient in or out of bed | | | | |
| 17. Making him comfortable in bed or chair | | | | |
| 18. Putting in ear-drops or eye-drops | | | | |
| 19. Assisting him with bathing | | | | |
| 20. Taking the temperature | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Patients' Questionnaire

CARE ACTIVITIES IN HOSPITAL

Below is a list of some activities which may be required by patients. Thinking back on your stay in this hospital, try to remember who did each of the following things for you. If a particular activity was not part of your care at all, tick the "Never done" column. Tick at least one column for each item. You may tick more than one column if more than one answer is true.

Please leave this column blank

| During my stay in hospital the following were done by:- | A nurse | My relative | Myself | Never done | Don't know |
|---------------------------------------------------------|---------|-------------|--------|------------|------------|
| 1. Filled in my fluid chart | | | | | |
| 2. Applied ointment to my skin | | | | | |
| 3. Dressed or undressed me | | | | | |
| 4. Cleaned my teeth or mouth | | | | | |
| 5. Brought or removed a bedpan or bottle | | | | | |
| 6. Took my pulse | | | | | |
| 7. Helped me to eat or drink | | | | | |
| 8. Brushed my hair | | | | | |
| 9. Helped me to walk to the toilet | | | | | |
| 10. Tested my urine | | | | | |
| 11. Gave me an injection | | | | | |
| 12. Rubbed my back or bottom | | | | | |
| 13. Gave me a suppository for my bowels | | | | | |
| 14. Tidied my bedclothes or pillows | | | | | |
| 15. Washed me in bed | | | | | |
| 16. Helped me to get in or out of bed | | | | | |
| 17. Made me comfortable in bed or chair | | | | | |
| 18. Put in ear-drops or eye-drops | | | | | |
| 19. Assisted me with bathing | | | | | |
| 20. Took my temperature | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Relatives' Questionnaire

please leave
this column
blank

CARE ACTIVITIES IN HOSPITAL

Below is a list of some activities which may be required by patients. Thinking back on your relative's stay in this hospital, try to remember who did each of the following for him/her. If a particular activity was not part of your relative's care at all, tick the "Never done" column. If you just can't remember, tick the "Don't Know" column. Tick at least one column for each item. You may tick more than one column if more than one answer is true.

| During my relative's stay in hospital the following were done by: | A nurse | My relative (i.e. the patient) | Myself | Never done | Don't know |
|-------------------------------------------------------------------|---------|--------------------------------|--------|------------|------------|
| 1. Filled in the fluid chart | | | | | |
| 2. Applied ointment to the patient's skin | | | | | |
| 3. Dressed or undressed the patient | | | | | |
| 4. Cleaned the patient's mouth or teeth | | | | | |
| 5. Brought or removed a bedpan or bottle | | | | | |
| 6. Took the patient's pulse | | | | | |
| 7. Helped him or her to eat or drink | | | | | |
| 8. Brushed the patient's hair | | | | | |
| 9. Helped the patient to walk to the toilet | | | | | |
| 10. Tested the urine | | | | | |
| 11. Gave the patient an injection | | | | | |
| 12. Rubbed his/her back or bottom | | | | | |
| 13. Gave the patient a suppository for his/her bowels | | | | | |
| 14. Tidied the bedclothes or pillows | | | | | |
| 15. Washed the patient in bed | | | | | |
| 16. Helped the patient to get in or out of bed | | | | | |
| 17. Made him/her comfortable in the bed or chair | | | | | |
| 18. Put in ear-drops or eye-drops | | | | | |
| 19. Assisted the patient with bathing | | | | | |
| 20. Took the temperature | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE OTHER SIDE OF THIS SHEET OF PAPER:

Nurses' Questionnaire

Please leave this
column blank

OFFICIAL POLICIES TOWARDS SOME NURSING ISSUES

In this section, please give as much detail as you can. If you do not know, or have never been informed about this policy, please indicate that in your answer.

ISSUE ONE: THE PARTICIPATION OF PATIENTS I. THE PLANNING OF NURSING CARE.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

ISSUE TWO: THE PARTICIPATION OF RELATIVES IN THE PLANNING OF NURSING CARE.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

ISSUE THREE: THE EXTENT TO WHICH PATIENTS ARE ENCOURAGED TO ASSIST WITH THEIR OWN NURSING CARE.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

ISSUE FOUR: THE EXTENT TO WHICH RELATIVES ARE ENCOURAGED TO ASSIST WITH THE NURSING CARE OF THE PATIENT.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

Original version of "Nurses' attitudes towards the nursing
process" scale.

Nurses' Questionnaire

Please leave this
column blank

ATTITUDES TOWARDS THE NURSING PROCESS

In your opinion, what is the effect of the nursing process on each
of the following? Please tick one column for each question.

There are no right or wrong answers.

| | Very good | Good | Don't know | Bad | Very bad |
|------------------------------------------------|--------------|------|---------------|-----|-------------|
| 1. Patients' emotional wellbeing | | | | | |
| 2. Nurses' learning opportunities on the ward | | | | | |
| 3. Nurses' understanding of patients' problems | | | | | |
| 4. The nurse-patient relationship | | | | | |
| 5. The doctor's work | | | | | |
| 6. The overall standard of nursing care | | | | | |
| 7. Ward efficiency | | | | | |
| 8. The sister's job satisfaction | | | | | |
| 9. Ward atmosphere and morale | | | | | |
| 10. Patients' physical wellbeing | | | | | |
| 11. Relatives' wellbeing and contentment | | | | | |
| 12. Nurses' job satisfaction | | | | | |
| 13. Time spent on ward paperwork | | | | | |

IF YOU WOULD LIKE TO MAKE ANY GENERAL COMMENTS ON THE NURSING
PROCESS, PLEASE USE THE SPACE BELOW:

Please leave this
column blank

You have now finished. Thank you very much for filling in this questionnaire. I hope that the findings of this study will help our knowledge of patient care in hospital.

Could you please have a quick look over your forms to make sure you haven't missed out any questions.

Finally, I should be grateful for a few personal details. These will, Of course, be treated in complete confidence.

Are you: Male ☐ Female ☐

How old are you? 18-34 ☐ 35-51 ☐ 52-68 ☐

Are you: Single ☐

Married ☐

Widowed, separated or divorced ☐

Other (please specify) _____

Is your occupation: Working full-time ☐

Working part-time ☐

Student ☐

Housewife ☐

Retired ☐

Unemployed ☐

If working, please name your job: _____

Please describe your duties in your job: _____

If you have a spouse who is working, please name his/her job: _____

If you have a spouse who is working, please describe his/her duties in the job: _____

Please list any educational qualifications you have: _____

Please list any professional or technical qualifications you have: _____

What is your nationality? _____

Where were you born? _____

APPENDIX PART 2 NUMBER 11

Ward information sheet

JULIA BROOKINGWARD INFORMATION SHEET

NAME OF HOSPITAL :

NAME OF WARD:

LOCATION OF WARD IN HOSPITAL:

TYPE OF WARD:

SEX OF PATIENTS:

NUMBER OF BEDS:

NAME OF SISTER(S):

PATTERN OF STAFFING:

LAYOUT OF WARD:

LEVEL OF ACTIVITY:

NURSING PROCESS SCORE:

NURSING PROCESS USE: GENERAL COMMENTS:

NURSING PROCESS: LENGTH OF TIME IN USE :

ORGANISATION OF WORK:

WARD ATMOSPHERE:

GENERAL COMMENTS ABOUT STAFF :

GENERAL COMMENTS ABOUT WARD:

NURSING OFFICER:

MEDICAL STAFF:

date of observations _____

signature of observer _____

INTERVIEW WITH NURSE

CODE N _____

Date and Time of interview _____
Name _____
Hospital _____
Ward and type of ward (if applicable) _____
Unit/Area/Division (if applicable) _____
Nursing process _____
Fluent English _____
Nationality _____
Place of birth _____
Present Position: Divisional N.O. ☐
Senior N.O. ☐
N.O. ☐
Sister/Charge Nurse ☐
Staff Nurse ☐
S.E.N. ☐
Student ☐
Pupil ☐

INTERVIEW

Introduce self- name, Chelsea, nurse, researcher.
Explain project- one simple questionnaire. Could fill it in over two sessions if tired. Show them letter. Ask them to participate.
Check they will be here in a couple of days time.
Any questions?

appointment to collect completed questionnaires:

DATE _____ TIME _____ PLACE _____

My subjective impressinn of this nurse;

Mental condition (emotional and intellectual) _____
Willingness and capability to take part in study _____
Attitudes to the study _____
Attitudes to the issues _____

INTERVIEW WITH PATIENT

CODE _____

INFORMATION FROM NOTES AND KARDEX

Date and time _____
 Name _____
 Hospital _____
 Ward and type of ward. Bed number _____
 Nursing Process _____
 Date of admission (minimum 4 days ago) _____
 Diagnosis _____
 Tests and treatment _____
 Next of kin _____
 Age (18-68) _____
 Eyesight _____
 Psychiatric history _____
 Resident in UK. _____
 Fluent English _____
 Occupation _____
 Nationality and place of birth _____
 Predicted date of discharge (at least 2 days hence) _____

INTERVIEW WITH PATIENT

Introduce self: name, Chelsea, Nurse, Researcher

Explain project- one simple questionnaire. Fill in over 2 sessions if tired

Show them letter. Ask them to participate

RELATIVE:

Do you have an adult relative or close friend with whom you live , and who visits frequently? If friend explain wording. Will relative fill in form?

Age (18-68) _____

Eyesight _____

Resident in UK. _____

Fluent English _____

Relative is patient's: husband or wife ☐ Son or daughter ☐Father or mother ☐ Brother or sister ☐ Aunt or Uncle ☐ Niece orNephew ☐ Other _____

Relative visits patient: Daily ☐ 4 times a week ☐ 2 times a week ☐
 weekly ☐

Relative is next visiting: _____

Appointment to collect forms: DATE _____ TIME _____ PLACE _____

SUBJECTIVE IMPRESSION OF THIS PATIENT: Physical condition _____

Emotional and intellectual _____

willingness and capability to participate in study _____

Questionnaire for Nurses

Julia I. Brooking BSc (Hons): SRN. RMN. Dip.N. (Lond).

Department of Nursing Studies

Chelsea College

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488 Ext. 550

Dear Nurse,

I am a nurse studying the views of patients, nurses and relatives towards aspects of nursing care in hospitals. I hope very much that the results of this work will help our understanding of patient care.

I am looking for a random cross-section of nurses, and your name has been chosen by chance. I would be most grateful if you would fill in the enclosed questionnaire as soon as possible. Your name is not required and all information will be treated in strict confidence. I have no official connection with this hospital or ward.

Please remember that it is your opinion that I am interested in. It would be best if you would fill out the entire questionnaire without discussing it with anyone. Please try to answer the questions as frankly and openly as you can. There are no right or wrong answers. If you cannot answer a particular question, just write "Don't know".

Thank you for your valuable contribution to this work. I shall see you again in a couple of days, as arranged, to collect your completed forms. If you have any questions, please ask me when I see you again.

Yours sincerely,

Julia Brooking

(Mrs) J.I.Brooking, BSc(Hons) SRN. ERN. DipN(Lond)
Nurse Researcher

P.S. You are under no obligation to take part in this project should you not wish to do so.

Please leave this
column blank

Code N _____

NURSES' QUESTIONNAIRE

Some questions have boxes: ☐ Tick the one box which is most appropriate for you.

Some questions have dotted lines: _____ Write your answer on this.

FOR WARD-BASED NURSES ONLY:

How much time have you spent working on wards in which the nursing process was used?

- None ☐
- Less than 2 months ☐
- 2-6 months ☐
- 7-12 months ☐
- More than a year ☐

FOR NURSING OFFICERS AND ABOVE ONLY:

How long have you been directly concerned with the nursing process in your unit or area?

- Not at all ☐
- Less than 2 months ☐
- 2-6 months ☐
- 7-12 months ☐
- More than a year ☐

FOR ALL NURSES:

Have you read any books or articles about the nursing process?

- No ☐
- One or two ☐
- Three or more ☐

In your current position, are you encouraged to read about the nursing process?

- No, not really ☐
- Yes, to a certain extent ☐
- Yes, very much ☐

Have you attended any lectures, study days, discussions or seminars on the nursing process?

- No ☐
- Yes, one ☐
- Yes, several ☐

please
leave
blank

In this section please tick whichever of the five columns best describes your view of the previous statement. Remember there are no right or wrong answers. I am simply interested in your personal opinion.

| | Strongly disagree | Disagree | Don't know | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------|-------|----------------|
| 1. The essence of nursing is doing things for people to enable them to rest and relax in hospital. | | | | | |
| 2. When a patient is first admitted, the nurse should ask him which of his problems and needs he regards as most important. | | | | | |
| 3. Relatives have a right to know what is being done to their "nearest and dearest" by the nursing staff. | | | | | |
| 4. When nurses are considering what is best for a particular patient, they should ask him what he prefers. | | | | | |
| 5. Information from a spouse about the patient's normal life style helps nurses to assess what care will be required. | | | | | |
| 6. If patients are well enough they should be allowed to keep their own medicines in their lockers, and take them as prescribed. | | | | | |
| 7. Patients must accept that whilst in hospital they have no right to question nurses' decisions about what needs to be done to them. | | | | | |
| 8. Nurses should encourage patients to be as independent as possible. | | | | | |
| 9. Even if it would be quicker for a nurse to dress an elderly lady, she should try to encourage the old lady to do it herself. | | | | | |
| 10. Patients who are well enough should be allowed to write up their own charts of how much fluid they are drinking each day. | | | | | |
| 11. Before an operation the implications and risks of surgery should be discussed with the patient's nearest relative. | | | | | |

leave
blank

| | Strongly agree | Agree | Don't know | Disagree | Strongly disagree | |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|------------|----------|-------------------|--|
| 12. Patients are entitled to do things for themselves as long as they feel well enough, and provided it is medically safe. | | | | | | |
| 13. It is up to the nurses to assess how often patients need to wash their hair whilst in hospital. | | | | | | |
| 14. It is always the nurses' responsibility to decide on the most suitable time to renew a patient's bandage. | | | | | | |
| 15. Relatives must accept that they are not entitled to do anything for the patient while he is the responsibility of the hospital. | | | | | | |
| 16. If a patient has a skin disease, the nurse should apply the ointment to ensure that it is rubbed in properly. | | | | | | |
| 17. As far as possible, patients should be allowed to decide for themselves when they want to wash and bath. | | | | | | |
| 18. It will only lead to problems for the nurses if relatives are allowed to do too much for the patient. | | | | | | |
| 19. If a patient is going to need care at home, the nurses should teach his wife how to look after him while he is still in hospital. | | | | | | |
| 20. When a child is in hospital his mother should be encouraged to wash and feed him, provided this is medically safe. | | | | | | |
| 21. Relatives must accept that nurses have the training and experience to assess the patient's needs without interference from the family. | | | | | | |
| 22. It is good for both patients and nurses if relatives can help with simple tasks like giving the patient a cup of tea. | | | | | | |
| 23. In planning a course of rehabilitation after a stroke, the nearest relatives should be invited to contribute their ideas. | | | | | | |
| 24. Most patients are happy to hand over to the nurses complete responsibility for deciding what care they require. | | | | | | |

IF YOU WISH TO COMMENT, PLEASE USE THE OTHER SIDE OF THIS PAGE:

Nurses' Questionnaire

please leave
this column
blank

HOW YOU ORGANISE THE CARE OF YOUR PATIENTS

Please tick one column for each question. If you do not currently work in direct patient contact, please answer as you would if you were working on a ward.

| When I am caring for a patient: | Never | Sometimes | Often | Always | Don't know |
|------------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|------------|
| 1. I plan the nursing care without asking the patient's family what they think. | | | | | |
| 2. I tend to do everything for my patients, even if they could manage themselves. | | | | | |
| 3. I discourage the family from doing anything for the patient while he/she is in the care of the hospital. | | | | | |
| 4. I encourage the patient to express his/her views when decisions about his/her nursing care have to be made. | | | | | |
| 5. I encourage the relatives to help with the patient's nursing care in various ways. | | | | | |
| 6. I encourage my patients to be as independent as possible, and help themselves as far as their illness allows. | | | | | |
| 7. I try to consult the relatives when decisions about the patient's care have to be made. | | | | | |
| 8. I tend to decide what needs to be done for the patient without asking for his/her views. | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE OTHER SIDE OF THIS SHEET OF PAPER

Nurses' Questionnaire

please leave the
column blank

CARE ACTIVITIES IN HOSPITAL

Below is a list of some activities which may be required by patients. Please decide whether, in your opinion, each activity could be carried out by a nurse, the patient himself or the patient's relative. Tick at least one column for each item. However, you may tick several columns if more than one answer seems to be appropriate.

The following activities could be done by:

| | Nurse | Patient | Relative | Don't know |
|----------------------------------------------|-------|---------|----------|------------|
| 1. Filling in the fluid chart | | | | |
| 2. Applying ointment to the patient's skin | | | | |
| 3. Dressing or undressing the patient | | | | |
| 4. Cleaning the patient's teeth or mouth | | | | |
| 5. Bringing or removing bedpan or bottle | | | | |
| 6. Taking the pulse | | | | |
| 7. Helping the patient to eat or drink | | | | |
| 8. Brushing the patient's hair | | | | |
| 9. Helping the patient to walk to the toilet | | | | |
| 10. Testing the urine | | | | |
| 11. Giving an injection | | | | |
| 12. Rubbing the patient's back or bottom | | | | |
| 13. Giving a suppository | | | | |
| 14. Tidying the bedclothes or pillows | | | | |
| 15. Washing the patient in bed | | | | |
| 16. Helping the patient in or out of bed | | | | |
| 17. Making him comfortable in bed or chair | | | | |
| 18. Putting in ear-drops or eye-drops | | | | |
| 19. Assisting him with bathing | | | | |
| 20. Taking the temperature | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Please leave this
column blank

Nurses' Questionnaire

OFFICIAL POLICIES TOWARDS SOME NURSING ISSUES

In this section, please give as much detail as you can. If you do not know, or have never been informed about this policy, please indicate that in your answer.

ISSUE ONE: THE PARTICIPATION OF PATIENTS IN THE PLANNING OF NURSING CARE.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

ISSUE TWO: THE PARTICIPATION OF RELATIVES IN THE PLANNING OF NURSING CARE.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

ISSUE THREE: THE EXTENT TO WHICH PATIENTS ARE ENCOURAGED TO ASSIST WITH THEIR OWN NURSING CARE.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

ISSUE FOUR: THE EXTENT TO WHICH RELATIVES ARE ENCOURAGED TO ASSIST WITH THE NURSING CARE OF THE PATIENT.

a) What is your ward, unit or area policy towards the above issue?

b) What, if anything, are nurses in training taught about the above issue?

LEAVE
BLANKNurses' Questionnaire

In your opinion, what is the effect of the nursing process on each of the following? Please tick one column for each question. There are no right or wrong answers.

| | Very good | Good | No effect | Don't know | Bad | Very bad | |
|-----------------------------------------|--------------|------|--------------|---------------|-----|-------------|--|
| 1. Patients' emotional wellbeing | | | | | | | |
| 2. Nurses' learning opportunities | | | | | | | |
| 3. The nurse-patient relationship | | | | | | | |
| 4. The doctors' work | | | | | | | |
| 5. The overall standard of nursing care | | | | | | | |
| 6. Sisters' job satisfaction | | | | | | | |
| 7. Ward atmosphere and morale | | | | | | | |
| 8. Patients' physical wellbeing | | | | | | | |
| 9. Relatives' contentment and wellbeing | | | | | | | |
| 10. Nurses' job satisfaction | | | | | | | |
| 11. Time spent on paperwork | | | | | | | |

IF YOU WOULD LIKE TO MAKE ANY GENERAL COMMENTS ON THE NURSING PROCESS,
PLEASE USE THE SPACE BELOW:

You have now finished. Thank you very much for filling in this questionnaire. I hope that the findings of this study will help our knowledge of patient care in hospital.

Could you please have a quick look over your forms to make sure you haven't missed out any questions.

Finally, I should be grateful for a few personal details. These will, Of course, be treated in complete confidence.

Are you: Male ☐ Female ☐

How old are you? 18-34 ☐ 35-51 ☐ 52-68 ☐

Are you: Single ☐
 Married ☐
 Widowed, separated or divorced ☐
 Other (please specify) _____

Is your occupation: Working full-time ☐
 Working part-time ☐
 Student ☐
 Housewife ☐
 Retired ☐
 Unemployed ☐

If working, please name your job: _____

Please describe your duties in your job: _____

If you have a spouse who is working, please name his/her job: _____

If you have a spouse who is working, please describe his/her duties in the job: _____

Please list any educational qualifications you have: _____

Please list any professional or technical qualifications you have: _____

What is your nationality? _____

Where were you born? _____

Please leave this column blank

Questionnaire for Patients

Julia I. Brooking BSc (Hons). SRN. RMN. Dip.N. (Lond).

Department of Nursing Studies

Chelsea College

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488 Ext. 550

Dear Patient,

I am a nurse studying the views of patients, nurses and relatives towards aspects of nursing care in hospitals. I hope very much that the results of this work will help our understanding of patient care.

I am looking for a random cross-section of patients, and your name has been chosen by chance. I would be most grateful if you would fill in the enclosed questionnaire as soon as possible. Your name is not required and all information will be treated in strict confidence. I have no official connection with this hospital or ward.

Please remember that it is your opinion that I am interested in. It would be best if you would fill out the entire form without discussing the questions with anyone, not even your relatives. Please try to answer the questions as frankly and openly as you can. There are no right or wrong answers. If you cannot answer a particular question, just write "Don't know".

You will see that I have enclosed another slightly different form to be filled in by your nearest adult relative or friend. This is because I am interested in the views of relatives as well as patients. Please ask him or her to complete the form next time they visit, and to leave the completed form with you. I shall come to the ward again in a couple of days to collect the forms from you.

Thank you for your valuable contribution to this work. If you have any questions, please ask me when I come to see you again.

Yours sincerely,

Julia Brooking

(Mrs) J.I. Brooking, BSc. STN. RN. Dip. (Lond)
Nurse Researcher

P.S. You are under no obligation to take part in this project should you not wish to do so.

Please leave this
column blank

Code P _____

PATIENTS' QUESTIONNAIRE

Some questions have boxes: ☐ Tick the one box which is most appropriate for you.

Some questions have dotted lines: _____ Write your answer on this.

What tests and treatment are you having during your stay in hospital?

What are you suffering from?

How many times have you been a patient in hospital before? _____

Have you ever worked in a hospital? Yes ☐ No ☐

If yes, what was your job?

If yes, how long did you work in hospital(s)? _____

Please tick the box which best sums up how you felt about coming into hospital this time:

Not at all worried ☐

Slightly worried ☐

Moderately worried ☐

Very worried ☐

In this section please tick whichever of the five columns best describes your view of the previous statement. Remember there are no right or wrong answers. I am simply interested in your personal opinion.

| | Strongly disagree | Disagree | Don't know | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------|-------|----------------|
| 1. The essence of nursing is doing things for people to enable them to rest and relax in hospital. | | | | | |
| 2. When a patient is first admitted, the nurse should ask him which of his problems and needs he regards as most important. | | | | | |
| 3. Relatives have a right to know what is being done to their "nearest and dearest" by the nursing staff. | | | | | |
| 4. When nurses are considering what is best for a particular patient, they should ask him what he prefers. | | | | | |
| 5. Information from a spouse about the patient's normal life style helps nurses to assess what care will be required. | | | | | |
| 6. If patients are well enough they should be allowed to keep their own medicines in their lockers, and take them as prescribed. | | | | | |
| 7. Patients must accept that whilst in hospital they have no right to question nurses' decisions about what needs to be done to them. | | | | | |
| 8. Nurses should encourage patients to be as independent as possible. | | | | | |
| 9. Even if it would be quicker for a nurse to dress an elderly lady, she should try to encourage the old lady to do it herself. | | | | | |
| 10. Patients who are well enough should be allowed to write up their own charts of how much fluid they are drinking each day. | | | | | |
| 11. Before an operation the implications and risks of surgery should be discussed with the patient's nearest relative. | | | | | |

| | Strongly agree | Agree | Don't know | Disagree | Strongly disagree |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|------------|----------|-------------------|
| 12. Patients are entitled to do things for themselves as long as they feel well enough, and provided it is medically safe. | | | | | |
| 13. It is up to the nurses to assess how often patients need to wash their hair whilst in hospital. | | | | | |
| 14. It is always the nurses responsibility to decide on the most suitable time to renew a patient's bandage. | | | | | |
| 15. Relatives must accept that they are not entitled to do anything for the patient while he is the responsibility of the hospital. | | | | | |
| 16. If a patient has a skin disease, the nurse should apply the ointment to ensure that it is rubbed in properly. | | | | | |
| 17. As far as possible, patients should be allowed to decide for themselves when they want to wash and bath. | | | | | |
| 18. It will only lead to problems for the nurses if relatives are allowed to do too much for the patient. | | | | | |
| 19. If a patient is going to need care at home, the nurses should teach his wife how to look after him while he is still in hospital. | | | | | |
| 20. When a child is in hospital his mother should be encouraged to wash and feed him, provided this is medically safe. | | | | | |
| 21. Relatives must accept that nurses have the training and experience to assess the patient's needs without interference from the family. | | | | | |
| 22. It is good for both patients and nurses if relatives can help with simple tasks like giving the patient a cup of tea. | | | | | |
| 23. In planning a course of rehabilitation after a stroke, the nearest relatives should be invited to contribute their ideas. | | | | | |
| 24. Most patients are happy to hand over to the nurses complete responsibility for deciding what care they require. | | | | | |

Patients' Questionnaire

INVOLVEMENT IN HOSPITAL CARE DURING THIS STAY IN HOSPITAL

please tick one column for each question Never Sometimes Often Always Don't know

1. How often were you encouraged to ..
express your views when decisions
about your nursing had to be made?

2. How often were your relatives
encouraged to help with your
care in various ways?

3. How often did the nurses encourage
you to help yourself as far as
your illness allowed?

4. How often were your relatives
consulted by the nurses when
decisions were being made about
your care?

HOW MUCH INVOLVEMENT IN CARE WOULD YOU IDEALLY LIKE?

Please tick one column for each question Never Sometimes Often Always Don't know

1. How often would you like to be
independent, and help yourself as
far as your illness allowed?

2. How often would you like your
relatives to be able to help by
doing simple nursing tasks for
you?

3. How often would you like to
take part in discussions to
plan your nursing care?

4. How often would you like your
relatives to have a say in the
planning of your care?

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE OTHER SIDE OF THIS PAGE:

Patients' Questionnaire

Please leave this
column blank

CARE ACTIVITIES IN HOSPITAL

Below is a list of some activities which may be required by patients.

Thinking back on your stay in this hospital, try to remember who did each of the following things for you. If a particular activity was not part of your care at all, tick the "Never done" column. Tick at least one column for each item. You may tick more than one column if more than one answer is true.

| During my stay in hospital the following were done by:- | A nurse | My relative | Myself | Never done | Don't know |
|---------------------------------------------------------|---------|-------------|--------|------------|------------|
| 1. Filled in my fluid chart | | | | | |
| 2. Applied ointment to my skin | | | | | |
| 3. Dressed or undressed me | | | | | |
| 4. Cleaned my teeth or mouth | | | | | |
| 5. Brought or removed a bedpan or bottle | | | | | |
| 6. Took my pulse | | | | | |
| 7. Helped me to eat or drink | | | | | |
| 8. Brushed my hair | | | | | |
| 9. Helped me to walk to the toilet | | | | | |
| 10. Tested my urine | | | | | |
| 11. Gave me an injection | | | | | |
| 12. Rubbed my back or bottom | | | | | |
| 13. Gave me a suppository for my bowels | | | | | |
| 14. Tidied my bedclothes or pillows | | | | | |
| 15. Washed me in bed | | | | | |
| 16. Helped me to get in or out of bed | | | | | |
| 17. Made me comfortable in bed or chair | | | | | |
| 18. Put in ear-drops or eye-drops | | | | | |
| 19. Assisted me with bathing | | | | | |
| 20. Took my temperature | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE SPACE BELOW:

Please leave this
column blank

You have now finished. Thank you very much for filling in this questionnaire. I hope that the findings of this study will help our knowledge of patient care in hospital.

Could you please have a quick look over your forms to make sure you haven't missed out any questions.

Finally, I should be grateful for a few personal details. These will, Of course, be treated in complete confidence.

Are you: Male ☐ Female ☐

How old are you? 18-34 ☐ 35-51 ☐ 52-68 ☐

Are you: Single ☐
Married ☐
Widowed, separated or divorced ☐
Other (please specify) _____

Is your occupation: Working full-time ☐
Working part-time ☐
Student ☐
Housewife ☐
Retired ☐
Unemployed ☐

If working, please name your job: _____

Please describe your duties in your job: _____

If you have a spouse who is working, please name his/her job: _____

If you have a spouse who is working, please describe his/her duties in the job: _____

Please list any educational qualifications you have: _____

Please list any professional or technical qualifications you have: _____

What is your nationality? _____

Where were you born? _____

Questionnaire for Relatives

Julia I. Brooking BSc (Hons). SRN. RMN. Dip.N. (Lond).
Department of Nursing Studies

Chelsea College

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488 Ext.550

Dear Relative,

I am a nurse studying the views of patients, nurses and relatives towards aspects of nursing care in hospitals. I hope very much that the results of this work will help our understanding of patient care.

The member of your family who is a patient in this hospital has been asked to participate in this study completely by chance. I am simply looking for a random cross-section of patients. As I am also interested in the opinions of patient's relatives, I would be most grateful if you could fill in the enclosed questionnaire as soon as possible. Your name is not required and all information will be treated in strict confidence. I have no official connection with this hospital or ward.

Please remember that it is your opinion that I am interested in. It would be best if you would fill in the entire form without discussing the questions with anyone, not even your relative. Please try to answer the questions as frankly and openly as you can. There are no right or wrong answers. If you cannot answer a particular question, just write "Don't know".

Could you please leave your completed form with the patient. I shall come to the ward again in a couple of days to collect the forms from your relative.

Thank you for your valuable contribution to this work. If you have any questions, please contact me at the address shown.

Yours sincerely,

Julia Brooking

(Mrs) J.I.Brooking, BSc. SRN. RMN. DipN(Lond)

Nurse Researcher

P.S. You are under no obligation to take part in this project should you not wish to do so.

RELATIVES' QUESTIONNAIREPlease leave this
column blank

Code R/ _____

Some questions have boxes: ☐ Tick the one box which
is most appropriate for you.

Some questions have dotted lines: _____ Write your
answer on this.

What tests and treatment is your relative having during his/her
stay in hospital? (If you have not been told, please state this.)

What is your relative suffering from? (If you have not been told,
please state this.)

How many times, if ever, have you been a patient in hospital?

Have you ever worked in a hospital? Yes ☐ No ☐

If yes, what was your job? _____

If yes, how long did you work in hospital(s)? _____

Please tick the box which best sums up how you felt about your
relative coming into hospital this time:

Not at all worried ☐

Slightly worried ☐

Moderately worried ☐

Very worried ☐

What is your relationship to the patient?

I am the patient's: husband/wife ☐

son/ daughter ☐

father/ mother ☐

brother/ sister ☐

uncle/aunt ☐

nephew/ niece ☐

other (please specify) _____

How long does the journey from your home to the hospital take each way?

Less than 30 minutes ☐ 30-60 minutes ☐ More than one hour ☐

In this section please tick whichever of the five columns best describes your view of the previous statement. Remember there are no right or wrong answers. I am simply interested in your personal opinion.

please
leave
blank

| | Strongly disagree | Disagree | Don't know | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------|-------|----------------|
| 1. The essence of nursing is doing things for people to enable them to rest and relax in hospital. | | | | | |
| 2. When a patient is first admitted, the nurse should ask him which of his problems and needs he regards as most important. | | | | | |
| 3. Relatives have a right to know what is being done to their "nearest and dearest" by the nursing staff. | | | | | |
| 4. When nurses are considering what is best for a particular patient, they should ask him what he prefers. | | | | | |
| 5. Information from a spouse about the patient's normal life style helps nurses to assess what care will be required. | | | | | |
| 6. If patients are well enough they should be allowed to keep their own medicines in their lockers, and take them as prescribed. | | | | | |
| 7. Patients must accept that whilst in hospital they have no right to question nurses' decisions about what needs to be done to them. | | | | | |
| 8. Nurses should encourage patients to be as independent as possible. | | | | | |
| 9. Even if it would be quicker for a nurse to dress an elderly lady, she should try to encourage the old lady to do it herself. | | | | | |
| 10. Patients who are well enough should be allowed to write up their own charts of how much fluid they are drinking each day. | | | | | |
| 11. Before an operation the implications and risks of surgery should be discussed with the patient's nearest relative. | | | | | |

| | Strongly disagree | Disagree | Don't know | Agree | Strongly agree | leave blank |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------|-------|----------------|-------------|
| 12. Patients are entitled to do things for themselves as long as they feel well enough, and provided it is medically safe. | | | | | | |
| 13. It is up to the nurses to assess how often patients need to wash their hair whilst in hospital. | | | | | | |
| 14. It is always the nurses responsibility to decide on the most suitable time to renew a patient's bandage. | | | | | | |
| 15. Relatives must accept that they are not entitled to do anything for the patient while he is the responsibility of the hospital. | | | | | | |
| 16. If a patient has a skin disease, the nurse should apply the ointment to ensure that it is rubbed in properly. | | | | | | |
| 17. As far as possible, patients should be allowed to decide for themselves when they want to wash and bath. | | | | | | |
| 18. It will only lead to problems for the nurses if relatives are allowed to do too much for the patient. | | | | | | |
| 19. If a patient is going to need care at home, the nurses should teach his wife how to look after him while he is still in hospital. | | | | | | |
| 20. When a child is in hospital his mother should be encouraged to wash and feed him, provided this is medically safe. | | | | | | |
| 21. Relatives must accept that nurses have the training and experience to assess the patient's needs without interference from the family. | | | | | | |
| 22. It is good for both patients and nurses if relatives can help with simple tasks like giving the patient a cup of tea. | | | | | | |
| 23. In planning a course of rehabilitation after a stroke, the nearest relatives should be invited to contribute their ideas. | | | | | | |
| 24. Most patients are happy to hand over to the nurses complete responsibility for deciding what care they require. | | | | | | |

IF YOU WISH TO COMMENT, PLEASE USE THE OTHER SIDE OF THIS PAGE:

Relatives' Questionnaire

INVOLVEMENT IN CARE DURING THIS STAY IN HOSPITAL

Please tick one column for each question.

| | Never | Sometimes | Often | Always | Don't know |
|-------------------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|------------|
| 1. How often was your relative encouraged to express his/her views when decisions about his/her nursing had to be made? | | | | | |
| 2. How often were you encouraged to help with the patient's care in various ways? | | | | | |
| 3. How often did the nurses encourage your relative to help him/herself as far as the illness allowed? | | | | | |
| 4. How often were you consulted by the nurses when decisions were being made about the patient's care? | | | | | |

HOW MUCH INVOLVEMENT IN CARE WOULD YOU IDEALLY LIKE?

Please tick one column for each question.

| | Never | Sometimes | Often | Always | Don't know |
|------------------------------------------------------------------------------------------------------------------|-------|-----------|-------|--------|------------|
| 1. How often would you like your relative to be independent, and help him/herself as far as the illness allowed? | | | | | |
| 2. How often would you like to be able to help your relative by doing simple nursing tasks for him/her? | | | | | |
| 3. How often would you like your relative to take part in discussions to plan his/her nursing care? | | | | | |
| 4. How often would you like to have a say in the planning of your relative's care? | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE OTHER SIDE OF THIS PAGE:

CARE ACTIVITIES IN HOSPITAL

Below is a list of some activities which may be required by patients. Thinking back on your relative's stay in this hospital, try to remember who did each of the following for him/her. If a particular activity was not part of your relative's care at all, tick the "Never done" column. If you just can't remember, tick the "Don't Know" column. Tick at least one column for each item. You may tick more than one column if more than one answer is true.

| During my relative's stay in hospital the following were done by: | A nurse | My relative (i.e. the patient) | Myself | Never done | Don't know |
|-------------------------------------------------------------------|---------|--------------------------------|--------|------------|------------|
| 1. Filled in the fluid chart | | | | | |
| 2. Applied ointment to the patient's skin | | | | | |
| 3. Dressed or undressed the patient | | | | | |
| 4. Cleaned the patient's mouth or teeth | | | | | |
| 5. Brought or removed a bedpan or bottle | | | | | |
| 6. Took the patient's pulse | | | | | |
| 7. Helped him or her to eat or drink | | | | | |
| 8. Brushed the patient's hair | | | | | |
| 9. Helped the patient to walk to the toilet | | | | | |
| 10. Tested the urine | | | | | |
| 11. Gave the patient an injection | | | | | |
| 12. Rubbed his/her back or bottom | | | | | |
| 13. Gave the patient a suppository for his/her bowels | | | | | |
| 14. Tidied the bedclothes or pillows | | | | | |
| 15. Washed the patient in bed | | | | | |
| 16. Helped the patient to get in or out of bed | | | | | |
| 17. Made him/her comfortable in the bed or chair | | | | | |
| 18. Put in ear-drops or eye-drops | | | | | |
| 19. Assisted the patient with bathing | | | | | |
| 20. Took the temperature | | | | | |

IF YOU WISH TO MAKE ANY GENERAL COMMENTS, PLEASE USE THE OTHER SIDE OF THIS SHEET OF PAPER:

Please leave this
column blank

You have now finished. Thank you very much for filling in this questionnaire. I hope that the findings of this study will help our knowledge of patient care in hospital.

Could you please have a quick look over your forms to make sure you haven't missed out any questions.

Finally, I should be grateful for a few personal details. These will, Of course, be treated in complete confidence.

Are you: Male ☐ Female ☐

How old are you? 18-34 ☐ 35-51 ☐ 52-68 ☐

Are you: Single ☐
Married ☐
Widowed, separated or divorced ☐
Other (please specify) _____

Is your occupation: Working full-time ☐
Working part-time ☐
Student ☐
Housewife ☐
Retired ☐
Unemployed ☐

If working, please name your job: _____

Please describe your duties in your job: _____

If you have a spouse who is working, please name his/her job: _____

If you have a spouse who is working, please describe his/her duties in the job: _____

Please list any educational qualifications you have: _____

Please list any professional or technical qualifications you have: _____

What is your nationality? _____

Where were you born? _____

Chelsea College

University of London

Department of Nursing Studies

Professor J.C. Hayward, BSc, PhD, SRN
RMN, DN, RNT

Manresa Road, London, SW3 6LX
01-351 2488 Ext. 550

Nursing Education Research Unit

Director: (Mrs) C. Cox, BSc(Soc), MSc(Econ), SRN

17^a Gnslow Gardens, London SW7 3AL

01-589 4438/9

~~REDACTED~~, 1981.

Sister ~~REDACTED~~

Ward ~~REDACTED~~

~~REDACTED~~ Hospital,

~~REDACTED~~

London ~~REDACTED~~

Dear Sister ~~REDACTED~~

I have now completed my data collection in your ward. I am writing to thank you and all your staff for your assistance and cooperation during the last few weeks.

Nursing staff on all wards have been most helpful. I was pleased to find a high level of interest in nursing research throughout the hospital, and much enthusiasm about the nursing process and other innovations in patient care.

I shall write to the District Nursing Officer, ~~REDACTED~~, when the results of the questionnaire study are available. I am sure that she will want me to convey the findings to all relevant ward staff. It will take several months to analyse the data and produce a report. So you will appreciate that it may be some considerable time before any further information is available.

Thank you for your valuable help, without which this study would not have been possible.

Yours sincerely

(Mrs.) J.I.Brooking

Nursing Researcher

Chelsea College

University of London

Department of Nursing Studies
Professor J.C. Hayward, BSc, PhD, SRN
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Nursing Education Research Unit
Director (Mrs) C Cox, BSc(Soc), MSc(Econ), SRN
17a Onslow Gardens, London SW7 3AL
01-589 4438/9

~~REDACTED~~, 1981.

Miss ~~REDACTED~~
District Nursing Officer,
~~REDACTED~~ District,
~~REDACTED~~
London ~~REDACTED~~

Dear Miss ~~REDACTED~~

I have now completed my data collection at ~~REDACTED~~ I am writing to thank you for your assistance in enabling me to undertake this research study.

Nursing staff, at all levels, have been most helpful and cooperative towards the study. I was pleased to find a lot of interest in nursing research among the staff, and much enthusiasm about the nursing process and other innovations in patient care.

I shall write to you again when the results of the questionnaire study are available. You will appreciate that it will take several months to analyse the data and produce a report.

Thank you for your help, without which this study would not have been possible.

Yours sincerely

Julia Brooking

(Mrs.) J.I. Brooking
Nursing Researcher

On this page please tick whichever box is most appropriate for you:

please
leave
blank

15. Are you: Male ☐ Female ☐

16. How old are you? 13-24 ☐ 25-34 ☐ over 34 ☐

17. What is your grade in nursing?

student or pupil nurse ☐

sister, charge nurse, staff nurse, enrolled nurse ☐

senior nurse, nursing officer, or above ☐

18. What are your educational qualifications?

less than 4 O levels ☐

4 or more O levels ☐

A levels, diploma or degree ☐

19. Please describe briefly your area of nursing eg. surgical ward,
health visiting, etc. _____

Thank you for your help.

Nurses' "attitudes towards patient and family participation in care" scale. Inter-item correlation coefficients, using the Pearson r.

| Item Number | 4 | 7 | 13 | 14 | 17 | 24 | 1 | 6 | 8 | 9 | 10 | 12 | 16 | 5 | 11 | 21 | 23 | 3 | 15 | 18 | 19 | 20 | 22 |
|-------------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2 | .15 | .21 | .26 | .02 | .29 | .01 | .06 | .18 | .13 | .01 | .26 | .05 | .23 | .23 | .07 | .07 | .14 | .35 | .15 | .22 | .11 | .16 | .3 |
| | ** | ** | ** | | ** | | | | | | ** | | ** | ** | | | | ** | | * | | * | ** |
| 4 | | .1 | .19 | .25 | .42 | .22 | .01 | .37 | .0 | .01 | .2 | .03 | .14 | .23 | .17 | .41 | .29 | .04 | .02 | .27 | .28 | .2 | .04 |
| | | * | * | * | * | * | | ** | | | * | | * | * | * | * | * | * | * | * | * | * | * |
| 7 | | | .22 | .15 | .15 | .05 | .06 | .12 | .08 | .08 | .29 | .02 | .32 | .01 | .07 | .19 | .11 | .12 | .3 | .26 | .35 | .16 | .21 |
| | | | * | | | | | | | | ** | ** | | | * | | | * | * | * | * | * | * |
| 13 | | | | .24 | .14 | .06 | .11 | .07 | .03 | .09 | .18 | .04 | .24 | .09 | .09 | .1 | .01 | .0 | .15 | .24 | .13 | .04 | .09 |
| | | | | ** | | | | | | * | * | | * | * | | | | | * | * | * | * | * |
| 14 | Patient planning subscale | | | .01 | .17 | | .04 | .03 | .09 | .03 | .01 | .02 | .16 | .17 | .15 | .38 | .05 | .05 | .01 | .05 | .22 | .04 | .01 |
| | | | | * | | | | | | | | | * | | * | * | | | * | | | | |
| 17 | | | | .05 | .16 | .19 | .17 | .08 | .34 | .04 | .33 | .18 | .16 | .11 | .18 | .01 | .09 | .43 | .24 | .15 | .06 | | |
| | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 24 | | | | .03 | .3 | .26 | .19 | .05 | .05 | .03 | .11 | .17 | .29 | .08 | .01 | .02 | .15 | .08 | .07 | .18 | | | |
| | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 1 | | | | | .17 | .05 | .19 | .0 | .13 | .16 | .0 | .23 | .06 | .02 | .05 | .06 | .16 | .07 | .01 | .11 | | | |
| | | | | | * | * | | | | | | * | * | | | | * | * | * | * | * | * | * |
| 6 | | | | | .03 | .19 | .2 | .08 | .12 | .01 | .07 | .2 | .08 | .05 | .08 | .2 | .07 | .03 | .05 | | | | |
| | | | | | * | * | * | | | | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 8 | Patient implementation subscale | | | | .35 | .13 | .24 | .04 | .05 | .13 | .14 | .09 | .08 | .05 | .0 | .23 | .15 | .17 | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 9 | | | | | .25 | .11 | .05 | .26 | .4 | .06 | .16 | .13 | .02 | .09 | .24 | .11 | .22 | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 10 | | | | | .03 | .34 | .17 | .13 | .17 | .14 | .14 | .13 | .26 | .19 | .02 | .16 | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 12 | | | | | .05 | .12 | .19 | .01 | .1 | .11 | .13 | .04 | .16 | .29 | .32 | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 16 | | | | | .19 | .16 | .17 | .09 | .11 | .28 | .26 | .19 | .01 | .17 | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 5 | | | | | .16 | .22 | .29 | .25 | .22 | .21 | .08 | .12 | .16 | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 11 | | | | | .25 | .14 | .21 | .11 | .17 | .23 | .01 | .06 | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 21 | Relative planning subscale | | | | .05 | .23 | .13 | .27 | .13 | .01 | .07 | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 23 | | | | | .01 | .06 | .12 | .17 | .28 | .17 | | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 3 | | | | | .0 | .19 | .09 | .19 | .13 | | | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 15 | | | | | .33 | .01 | .06 | .17 | | | | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 18 | | | | | .22 | .08 | .05 | | | | | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 19 | | | | | .58 | .18 | | | | | | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 20 | | | | | .26 | | | | | | | | | | | | | | | | | | |
| | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |

Key

items arranged in blocks according to the 4 subscales.

correlation coefficients corrected to 2 decimal places

n = 107

significance levels:

* $p < .05$

** $p < .01$

*** $p < .001$

Relative implementation subscale

APPENDIX PART 2 NUMBER 19.

Additional data from nurses' "attitudes towards patient and family participation in care" scale. Inter-item correlation coefficients, using the Pearson r.

| Item Number | 4 | 7 | 13 | 14 | 17 | 24 | 1 | 6 | 8 | 9 | 10 | 12 | 16 | 5 | 11 | 21 | 23 | 3 | 15 | 18 | 19 | 20 | 22 |
|-------------|---------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 2 | .41* | .01 | .17 | .13 | .17 | .11 | .05 | .32 | .37 | .1 | .56 | .04 | .09 | .49 | .61 | .23 | .36 | .71 | .17 | .26 | .28 | .0 | .39* |
| 4 | | .73* | .36 | .42 | .46 | .12 | .07 | .18 | .23 | .12 | .53 | .18 | .55 | .36 | .26 | .59 | .46 | .3 | .18 | .28 | .44 | .37 | .51* |
| 7 | | | .3 | .41 | .46 | .15 | .21 | .03 | .04 | .19 | .3 | .18 | .35 | .21 | .16 | .62 | .29 | .02 | .2 | .12 | .29 | .31 | .25 |
| 13 | | | | .46 | .18 | .36 | .18 | .35 | .09 | .24 | .38 | .29 | .35 | .32 | .11 | .31 | .39 | .08 | .0 | .24 | .28 | .33 | .4* |
| 14 | Patient planning subscale | | | | .15 | .3 | .19 | .43 | .17 | .12 | .16 | .23 | .35 | .21 | .11 | .55 | .39 | .26 | .13 | .29 | .38 | .4 | .36* |
| 17 | | | | | | .26 | .03 | .0 | .06 | .04 | .27 | .11 | .17 | .04 | .01 | .41 | .21 | .0 | .04 | .1 | .22 | .15 | .35* |
| 24 | | | | | | | .02 | .26 | .09 | .23 | .24 | .0 | .14 | .24 | .16 | .17 | .21 | .07 | .03 | .04 | .16 | .08 | .17 |
| 1 | | | | | | | | .19 | .08 | .17 | .03 | .08 | .07 | .15 | .12 | .01 | .16 | .22 | .15 | .08 | .12 | .1 | .02 |
| 6 | | | | | | | | | .12 | .22 | .59 | .14 | .34 | .35 | .35 | .35 | .39 | .19 | .06 | .4 | .24 | .31 | .27 |
| 8 | | | | | | | | | | .46 | .29 | .09 | .08 | .35 | .33 | .19 | .21 | .02 | .12 | .26 | .16 | .12 | .22 |
| 9 | | | | | | | | | | | .22 | .06 | .1 | .28 | .18 | .05 | .29 | .08 | .01 | .12 | .19 | .16 | .11 |
| 10 | | | | | | | | | | | | .23 | .31 | .27 | .53 | .35 | .48 | .32 | .01 | .31 | .05 | .14 | .5* |
| 12 | | | | | | | | | | | | | .36 | .33 | .13 | .4 | .63 | .06 | .05 | .24 | .19 | .25 | .53* |
| 16 | | | | | | | | | | | | | | .15 | .29 | .43 | .39 | .17 | .05 | .42 | .25 | .29 | .39* |
| 5 | | | | | | | | | | | | | | | .31 | .12 | .48 | .29 | .32 | .0 | .13 | .0 | .46* |
| 11 | | | | | | | | | | | | | | | | .06 | .45 | .61 | .15 | .23 | .16 | .04 | .31 |
| 21 | | | | | | | | | | | | | | | | | .4 | .09 | .2 | .61 | .35 | .35 | .36* |
| 23 | | | | | | | | | | | | | | | | | | .13 | .17 | .25 | .12 | .2 | .76* |
| 3 | | | | | | | | | | | | | | | | | | | .24 | .03 | .31 | .08 | .08 |
| 15 | | | | | | | | | | | | | | | | | | | | .13 | .08 | .22 | .14 |
| 18 | | | | | | | | | | | | | | | | | | | | | .18 | .26 | .33 |
| 19 | | | | | | | | | | | | | | | | | | | | | | .75 | .09* |
| 20 | | | | | | | | | | | | | | | | | | | | | | | .22 |

Key

items arranged in blocks according to 4 subscales

correlation coefficients corrected to 2 decimal places

n = 34

* significant at $p < .05$

Relative
implementation
subscale

APPENDIX PART 2 NUMBER 20. Patients' "attitudes towards patient and family participation in care" scale. Inter-item correlation coefficients, using the Pearson r.

| Item Number | 4 | 7 | 13 | 14 | 17 | 24 | 1 | 6 | 8 | 9 | 10 | 12 | 16 | 5 | 11 | 21 | 23 | 3 | 15 | 18 | 19 | 20 | 22 |
|-------------|--------|-----|--------|--------|-----|-------|-----|-----|-------|-----|-----|-----|-----|--------|-----|-----|--------|--------|--------|-----|-----|--------|-----|
| 2 | .39*** | .03 | .01 | .04 | .09 | .13 | .09 | .15 | .08 | .04 | .14 | .06 | .02 | .38*** | .24 | .07 | .16 | .36*** | .16 | .01 | .18 | .06 | .04 |
| 4 | | .02 | .09 | .09 | .06 | .21 | .05 | .11 | .25** | .06 | .19 | .01 | .07 | .33*** | .29 | .18 | .14 | .44*** | .04 | .13 | .1 | .12 | .0 |
| 7 | | | .28*** | .23*** | .03 | .16 | .16 | .09 | .08 | .11 | .02 | .07 | .08 | .08 | .09 | .15 | .06 | .04 | .23 | .1 | .11 | .1 | .06 |
| 13 | | | | .28*** | .05 | .12 | .11 | .0 | .02 | .01 | .06 | .02 | .21 | .15 | .02 | .18 | .05 | .08 | .3 | .06 | .01 | .09 | .0 |
| 14 | | | | | .07 | .22 | .15 | .05 | .13 | .03 | .11 | .06 | .19 | .06 | .04 | .23 | .05 | .08 | .16 | .05 | .12 | .06 | .07 |
| 17 | | | | | | .25** | .15 | .22 | .08 | .13 | .09 | .1 | .12 | .06 | .1 | .12 | .17 | .01 | .06 | .1 | .0 | .08 | .05 |
| 24 | | | | | | | .11 | .15 | .06 | .02 | .13 | .03 | .02 | .01 | .17 | .31 | .15 | .11 | .03 | .09 | .17 | .02 | .09 |
| 1 | | | | | | | | .05 | .02 | .04 | .04 | .16 | .09 | .09 | .06 | .1 | .07 | .08 | .23 | .22 | .11 | .09 | .09 |
| 6 | | | | | | | | | .07 | .17 | .24 | .08 | .09 | .26 | .19 | .19 | .09 | .11 | .07 | .04 | .03 | .07 | .12 |
| 8 | | | | | | | | | .16 | .16 | .06 | .03 | .0 | .08 | .01 | .02 | .04 | .02 | .0 | .03 | .28 | .01 | |
| 9 | | | | | | | | | | .05 | .17 | .19 | .23 | .12 | .08 | .06 | .07 | .13 | .03 | .13 | .24 | .09 | |
| 10 | | | | | | | | | | | .0 | .13 | .07 | .08 | .06 | .03 | .02 | .12 | .05 | .04 | .05 | .01 | |
| 12 | | | | | | | | | | | | .04 | .05 | .14 | .08 | .02 | .13 | .01 | .01 | .11 | .22 | .07 | |
| 16 | | | | | | | | | | | | | .12 | .2 | .08 | .03 | .08 | .16 | .22 | .11 | .08 | .3 | |
| 5 | | | | | | | | | | | | | | .19 | .06 | .26 | .3 | .03 | .09 | .19 | .04 | .13 | |
| 11 | | | | | | | | | | | | | | | .09 | .1 | .49*** | .03 | .04 | .26 | .12 | .14 | |
| 21 | | | | | | | | | | | | | | | | .07 | .19 | .36*** | .32 | .08 | .01 | .06 | |
| 23 | | | | | | | | | | | | | | | | | .15 | .01 | .01 | .24 | .2 | .12 | |
| 3 | | | | | | | | | | | | | | | | | | .02 | .07 | .12 | .11 | .12 | |
| 15 | | | | | | | | | | | | | | | | | | | .43*** | .09 | .07 | .19 | |
| 18 | | | | | | | | | | | | | | | | | | | | .01 | .07 | .13 | |
| 19 | | | | | | | | | | | | | | | | | | | | | .19 | .19 | |
| 20 | | | | | | | | | | | | | | | | | | | | | | .31*** | |

Key

Items arranged in blocks according to the 4 subscales

correlation coefficients corrected to 2 decimal places

n = 114

significance levels:

* p < .05

** p < .01

*** p < .001

Relative planning subscale

Relative implementation subscale

APPENDIX PART 2 NUMBER 21. Relatives' "attitudes towards patient and family participation in care" scale. Inter-item correlation coefficients, using the Pearson r.

| Item Number | 4 | 7 | 13 | 14 | 17 | 24 | 1 | 6 | 8 | 9 | 10 | 12 | 16 | 5 | 11 | 21 | 23 | 3 | 15 | 18 | 19 | 20 | 22 |
|-------------|------|-----|------|------|------|-------|--------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2 | .24* | .02 | .25* | .13 | .22 | .12 | .35*** | .05 | .05 | .01 | .19 | .15 | .11 | .19 | .12 | .01 | .21 | .25 | .08 | .19 | .19 | .26 | .21 |
| 4 | | .2* | .03 | .14 | .19 | .29** | .11 | .20 | .06 | .04 | .05 | .15 | .23 | .34 | .01 | .32 | .17 | .11 | .01 | .07 | .22 | .26 | .01 |
| 7 | | | .26* | .28* | .32* | .28* | .10 | .23 | .03 | .25 | .21 | .23 | .18 | .10 | .07 | .36 | .05 | .02 | .39 | .43 | .06 | .23 | .08 |
| 13 | | | | .26* | .02 | .14 | .21 | .04 | .12 | .17 | .11 | .2 | .21 | .04 | .06 | .33 | .12 | .01 | .28 | .27 | .01 | .07 | .09 |
| 14 | | | | | .03 | .43 | .37 | .03 | .08 | .02 | .01 | .23 | .04 | .01 | .01 | .5 | .01 | .03 | .25 | .42 | .19 | .01 | .08 |
| 17 | | | | | | .1 | .19 | .29 | .12 | .07 | .12 | .21 | .12 | .13 | .01 | .13 | .01 | .05 | .16 | .02 | .23 | .06 | .07 |
| 24 | | | | | | | .21 | .07 | .02 | .08 | .19 | .13 | .29 | .09 | .01 | .44 | .01 | .06 | .39 | .41 | .2 | .11 | .02 |
| 1 | | | | | | | | .02 | .02 | .09 | .01 | .08 | .08 | .01 | .12 | .29 | .19 | .06 | .15 | .16 | .05 | .28 | .28 |
| 6 | | | | | | | | | .26* | .14 | .37 | .04 | .31 | .11 | .03 | .17 | .06 | .01 | .04 | .12 | .18 | .07 | .02 |
| 8 | | | | | | | | | | .22 | .01 | .16 | .09 | .13 | .05 | .16 | .2 | .19 | .07 | .03 | .17 | .18 | .01 |
| 9 | | | | | | | | | | | .07 | .06 | .07 | .05 | .17 | .09 | .06 | .25 | .3 | .01 | .08 | .16 | .13 |
| 10 | | | | | | | | | | | | .06 | .25 | .09 | .03 | .07 | .09 | .08 | .04 | .16 | .06 | .18 | .12 |
| 12 | | | | | | | | | | | | | .03 | .21 | .26 | .29 | .38 | .36 | .29 | .12 | .29 | .35 | .31 |
| 16 | | | | | | | | | | | | | | .19 | .33 | .27 | .13 | .14 | .18 | .12 | .03 | .1 | .22 |
| 5 | | | | | | | | | | | | | | | .01 | .07 | .37 | .06 | .02 | .0 | .47 | .37 | .03 |
| 11 | | | | | | | | | | | | | | | | .03 | .38 | .41 | .09 | .13 | .16 | .39 | .39 |
| 21 | | | | | | | | | | | | | | | | | .02 | .05 | .49 | .48 | .02 | .02 | .12 |
| 23 | | | | | | | | | | | | | | | | | | .16 | .0 | .12 | .31 | .62 | .39 |
| 3 | | | | | | | | | | | | | | | | | | | .09 | .2 | .14 | .19 | .23 |
| 15 | | | | | | | | | | | | | | | | | | | | .41 | .03 | .04 | .03 |
| 18 | | | | | | | | | | | | | | | | | | | | | .02 | .08 | .16 |
| 19 | | | | | | | | | | | | | | | | | | | | | | .34 | .11 |
| 20 | | | | | | | | | | | | | | | | | | | | | | | .29 |

Key
 items arranged in blocks according to the 4 subscales
 correlation coefficients corrected to 2 decimal places
 n = 72
 significance levels:
 * p < .05
 ** p < .01
 *** p < .001

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| | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1 | <u>NURSING PROCESS SCALE: A RESEARCH INSTRUMENT</u> | Score |
| | <u>GENERAL POINTS</u> | 0-5 |
| | <ol style="list-style-type: none">1. Is nursing process used for all patients on the ward?2. When using nursing process, are learners supervised by qualified staff?3. Are books and articles on the nursing process available on the ward?4. Have any of the following been held to teach nursing process to ward staff: study days, lectures, discussion groups, or tutorials?5. Have all the permanent ward nursing staff attended at least one study day, lecture, discussion group or tutorial on the nursing process?6. Is the nursing process taught to learners in the School of Nursing?7. Do the ward medical staff understand and support the use of the nursing process?8. Do the various wards using the nursing process communicate with each other about their difficulties, successes etc.?9. Is there a committee or person responsible for coordination and implementation of the nursing process throughout the hospital?10. Do the senior nursing management understand and support the use of the nursing process?11. Could the Ward Sister's administrative style be described as that of "participative management"?12. Is the nursing process recognised by ward staff as having a cyclical nature? | |
| | <u>NURSING ASSESSMENT</u> | |
| | <ol style="list-style-type: none">1. Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients?2. Is an assessment made of all new patients, prior to implementing nursing care?3. Is a written nursing history taken, using a systematic format?4. Is the nursing history usually taken within 24 hours of admission?5. Is the nursing history taken during a friendly conversation, rather than just as a list of formal questions?6. Is the patient's family invited to contribute information during assessment? | |

r general
comments

7. Are nursing observations made of the patient's physical state?
8. Are nursing observations made of the patient's psychological state?
9. Are nursing observations made of the patient's social and economic state?
10. Are other data bases used in assessment eg. medical notes or district nurses' notes.

NURSING DIAGNOSIS

1. Are nursing problems identified for all new patients, prior to implementing nursing care?
2. Are potential and/or possible problems identified as well as actual problems?
3. Is a typology or check list used to assist in the identification of problems eg. Hendersons(1966)Activities of Daily Living, or Abdellah's 21 problems?
4. Is an attempt made to identify the causes of the patient's problems eg. physical, social, psychological or economic?
5. Are the problem statements arranged in a hierarchy of importance ie. are priorities identified?
6. Is the statement of problems (nursing diagnosis) made with the knowledge and agreement of the patient?
7. Are the existence of problems validated by asking the patient what he perceives his problems to be?

PLANNING OF NURSING CARE.

1. Is a written careplan produced which incorporates problem statements?
2. Is the written care plan regularly updated?
3. Are nursing care planning conferences or discussions held on the ward?
4. Are nursing rounds held on the ward?
5. Are multidisciplinary ward conferences or discussions held to discuss patient problems?
6. Is the same nurse responsible for the entire assessment and planning of one patient's care?
7. Is the care plan kept at the patient's bedside?
8. Is the patient allowed to see his care plan?
9. Does the care plan include discharge planning?
10. Are goals(nursing objectives) incorporated into the care plan?

r general
comments

3.

Score

0-5

11. Does the statement of goals include both long-term and short-term (proximate) goals?
12. Are the goals agreed upon with the patient and/or his family?
13. Are the goals always realistic?
14. Are the goals always precise and very specific?
15. Are the goals patient centred ie. written in terms of patient outcomes or behaviour?
16. Do the goals include a time element?
17. Are the goals arranged in order of priority?
18. Are planned nursing actions incorporated into the care plan?
19. Are planned nursing actions agreed upon with the patient and /or his family?
20. Are planned nursing actions written very precisely and in detail?

IMPLEMENTATION OF NURSING CARE

1. Is a system of patient allocation used throughout the ward?
2. Is the verbal handover (ward report) based on the care plans?
3. Are the written nursing progress reports based on patient problems and goals?
4. Do all ward nursing staff use the care plans as a basis for giving care?
5. Is the patient and/or his family always given an explanation of the care he is receiving?
6. Do nurses utilise appropriate nursing research findings in giving care?
7. Do the nurses see the restoration of independence as being the ultimate aim of nursing care?
8. Is it considered an essential part of nursing care to teach the patient, and/or his family, self-care?

EVALUATION OF NURSING CARE

1. Is systematic evaluation of care considered essential for all patients?
2. Is evaluation recorded on either the care plan or the progress notes?
3. Is a date for the evaluation of any nursing action included in the care plan?

4.

Score

0-5

4. Is the patient's progress towards the goals evaluated both objectively and subjectively?
5. Are the patient and/or his family included in evaluation?
6. Are the care plans and nursing actions modified according to the results of the evaluation?
7. Is any attempt being made to develop objective outcome criteria against which care can be evaluated?
8. Are self-evaluation or peer-evaluation used by the ward nurses to assess their own performance?

PLEASE LIST ,AND SCORE 0-5, ANY OTHER ITEMS WHICH YOU THINK SHOULD HAVE BEEN INCLUDED:

PLEASE COMPLETE:

Name _____

Position _____

Address _____

Experience with the nursing process (at both practical and theoretical levels) _____

APPENDIX PART 3. Number 2.Letter sent to nursing process experts requesting their participation in the validation exercise.**Chelsea College**

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488 Ext. 555

3rd. April, 1980.

I am attempting to develop a research instrument which can be used to measure how much the nursing process is being used in particular hospital wards. Because you are known to have considerable knowledge of the nursing process, I am writing to ask for your assistance in validating this scale.

I have extracted from the literature a number of statements about what is involved in the practical use of the nursing process. I have made these statements into questions which can be asked about a particular ward. It is assumed that the correct nursing process answer to each of these questions is "Yes". I realise that some of the questions are more crucial than others, so I should be most grateful if you could indicate your view of the importance of each on a scale from 0-5. Details of the scoring are enclosed. I should also be grateful for your general comments on the questions, together with details of any other questions which you think should be included.

When I have collected sufficient information from a number of experienced judges, about the relative importance of the various items, I shall be able to further refine the instrument. More validation and reliability testing will be carried out before the instrument is fully prepared. I shall, of course, acknowledge your contribution in any report of this work.

I believe that this could be a useful tool if it enables researchers to quantify the use of nursing process, albeit on a fairly crude ordinal scale. This should make comparisons among wards more objective. I do hope that you will find time to help, as I believe professional consensus is vital in developing such an instrument.

With grateful thanks for your assistance,

Yours sincerely,

(Mrs.) J.I. BROOKING, BSc. SRN. RMN. Dip.N(Lond)

Nursing Research Student

Chelsea College

Department of Nursing Studies

University of London

Manresa Road London SW3 6LX

01-351-2488

INSTRUCTIONS FOR VALIDATION OF THE NURSING PROCESS SCALE

1. It is assumed, for all questions, that the answer indicating use of the nursing process is "Yes".
2. Please rate each question according to your view of its importance in determining the extent to which nursing process is being used in a ward being tested.
3. Rating is on a scale from 0-5 as follows:
 5. Absolutely essential. Without this the ward cannot be said to be using the nursing process.
 4. Very important, but not absolutely essential.
 3. Moderately important.
 2. Of slight importance only.
 1. Of no real importance, although a part of nursing process.
 0. Totally irrelevant. This has nothing to do with nursing process.
4. Any general comments you wish to make about the questions, or the scale as a whole, will be much appreciated.
5. Please add, and score from 0-5, any other questions which you consider should have been included in the scale.
6. Please write your name, address, position and qualifications on the completed form before returning it. If you would prefer to remain anonymous, please disregard this.

THANK YOU FOR YOUR HELP.

APPENDIX PART3. Number 4.

letter of thanks sent to members of the panel of experts who
returned completed forms.

Chelsea College

Nursing Education Research Unit

Director (Mrs) C Cox BSc(Soc) MSc(Econ) SRN

University of London

Department of Nursing Studies

Professor J C Hayward BSc PhD SRN

RMN DN RNT

Manresa Road London SW3 6LX

01-351 2488 Ext 550

Thank you very much for returning my nursing process questionnaire, which I recently sent to you. I am most grateful to you for completing this form and for adding your comments, which will enable me to refine the instrument further. I hope that eventually this instrument can be used to quantify use of nursing process at ward level.

If you are interested in the further development of this work, or would like more information about it, please do not hesitate to contact me.

Thank you for your assistance.

Yours sincerely,

(Mrs) J.I.BROOKING

Nursing Researcher

APPENDIX PART 3. Number 5.

Letter of reminder sent to members of the panel
of experts who did not return completed forms
after four weeks.

Chelsea College

University of London

 Department of Nursing Studies
 Professor J C Hayward BSc, PhD SRN
 RMN DN RNT

 Manresa Road, London SW3 6LX
 01-351 2488 Ext 550

You may remember that I wrote to you a few weeks ago asking you to fill in and return to me a questionnaire. I asked you to rate the relative importance of a number of statements about the nursing process, for a measuring instrument which I am trying to develop.

As I have not yet received your reply, I wonder if you would please tick the appropriate box below, and return this letter to me in the stamped addressed envelope.

I am sure that you will appreciate that I cannot proceed with analysis of the responses, or further refining of the instrument, until I have heard from all the people to whom I sent it.

Thank you for your assistance.

Yours sincerely,

(Mrs.) J.I.BROOKING

Nursing Researcher

Please tick the appropriate box:

- | | |
|--------------------------------------------------------------|--------------------------|
| 1. I enclose the completed questionnaire. | <input type="checkbox"/> |
| 2. I have already returned the completed questionnaire. | <input type="checkbox"/> |
| 3. I have mislaid the questionnaire. Please send another. | <input type="checkbox"/> |
| 4. I never received a questionnaire. Please send another. | <input type="checkbox"/> |
| 5. I am unable to complete the questionnaire because _____ | <input type="checkbox"/> |
| <hr/> | |
| 6. I do not wish to complete the questionnaire because _____ | <input type="checkbox"/> |
| <hr/> | |

APPENDIX PART 3. Number 6 : Additional items suggested by members of the panel of experts for inclusion in the nursing process scale.

| <u>Number of item</u> | <u>Subject's Number</u> | <u>Item</u> |
|-----------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 1 | Do the nurses know who are their patients and vice-versa ? |
| 2 | 1 | Do the nurses participate in the medical rounds for their patient ? |
| 3. | 1 | Is the nurse caring for the patient responsible for the progress report ? |
| 4. | 5 | Is nursing process documentation used and updated during all of the 24 hour period ? (5) |
| 5. | 5 | Are any groups opposed to nursing process e.g. physio's, social workers, OT's, nurse manager, doctor ? (5) |
| 6. | 5 | Did assessment include : patients normal pattern of daily living, and coping mechanisms ? (5) |
| 7. | 2 | Is continuity of care afforded by each nurse being allocated to the same patient each day ? |
| 8. | 2 | Are any rounds done e.g. drugs, T.P.R. ? |
| 9. | 2 | Does one nurse interact with consultant giving information about all the patients ? |
| 10. | 8 | Has the ward a stated philosophy of nursing on which care is based ? (5) |
| 11. | 7 | Assessment - informing patient/relatives of the purpose of nursing process on this ward and opportunity for them to have a say about it (5). |
| 12. | 14 | Is there evidence that the nurse in charge organises the ward using the principles of nursing process e.g. assessment of nursing staff, care required by patients, facilities available before planning patient allocation etc. ? |
| 13. | 26 | Is nursing assessment and care plan made by the trained nurse responsible to sister for that patient ? (5) |
| 14. | 26 | Is care plan always made up by nurses, not auxiliaries ? (5) |
| 15. | 26 | Is evaluation and its outcome always done by a trained nurse, or team with trained nurse as its leader ? (5) |
| 16. | 27 | Do staff record findings on agreed documentation ? (5) |
| 17. | 32 | Method of briefing new ward staff i.e. change over of learners ? |
| 18. | 35 | Do the physio's, OT's, and social workers participate in the planning of care ? (3) |
| 19. | 35 | Do the above utilise the nursing process for communication ? (3) |
| 20. | 35 | Do community staff participate in the planning of discharge ? (4) |
| 21. | 35 | Are the patients' care plans transferred to the primary care team, if appropriate, on discharge ? (3) |
| 22. | 36 | Is care individualised ? (5) |
| 23. | 36. | Does the same nurse, or pair of nurses, care for the same patients whenever they are on duty ? (5) |
| 24. | 37 | Mention should be made of the need to involve other disciplines in the planning of nursing care. |

Items in the revised nursing process scale

GENERAL POINTS

1. Have any of the following been held to teach nursing process to ward staff: study days, lectures, discussions or tutorials ?
2. Have all the permanent ward nursing staff attended at least one study day, lecture, discussion or tutorial on the nursing process ?
3. Is the nursing process taught to learners in the School of Nursing ?
4. Could the ward sister be described as democratic i.e. does she involve nurses in decisions and does she delegate responsibility ?

NURSING ASSESSMENT

5. Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients ?
6. Is an assessment made of new patients, prior to implementing nursing care ?
7. Is a written nursing history taken, using a systematic format ?
8. Is the nursing history usually taken within twenty-four hours of admission ?
9. Are nursing observations made of the patient's physical state ?
10. Are nursing observations made of the patient's psychological state ?
11. Are nursing observations made of the patient's social and economic state ?
12. Are other information sources used in assessment e.g. medical notes or district nurses' notes ?
13. Are nursing problems identified for all new patients, prior to implementing nursing care ?
14. Are potential and/or possible problems identified as well as actual problems ?
15. Is an attempt made to find the causes of the patient's problems e.g. psychological, social etc. ?
16. Are the problem statements arranged in a hierarchy of importance i.e. are priorities identified ?
17. Is the statement of problems made with the knowledge, understanding and agreement of the patient ?

PLANNING OF NURSING CARE

18. Is a written care plan produced which incorporates patient's problems and/or needs ?
19. Is the care plan regularly updated ?
20. Are the nursing care planning discussions, conferences or rounds held on the ward ?
21. Does the care plan include discharge planning ?
22. Are goals (nursing objectives) incorporated into the care plan ?
23. Does the statement of goals include both long-term and short-term goals ?
24. Are the goals agreed upon with the patient and/or his family ?.

25. Are the goals always realistic ?
26. Are the goals patient centred i.e. written in terms of patient outcome or behaviour ?
27. Do the goals include a time element ?
28. Are planned nursing actions incorporated into the care plans ?
29. Are planned nursing actions agreed upon with the patient and/or his family ?
30. Are planned nursing actions written very precisely and in detail ?

IMPLEMENTATION OF NURSING CARE

31. Is a system of patient allocation used throughout the ward ?
32. Is a nurse allocated to the same patient, or group of patients, for several days ?
33. Is the verbal handover (ward report) based on the care plans ?
34. Are the written nursing progress reports based on patient problems and goals ?
35. Is each nurse responsible for the written progress reports and verbal handover for her patient or group of patients ?
36. Do nurses take part in the medical rounds for their particular patients ?
37. Do both day and night nursing staff use the care plans as a basis for giving care ?

EVALUATION OF NURSING CARE

38. Is systematic evaluation of care considered essential for all patients ?
39. Is evaluation recorded on either the care plan or the progress notes ?
40. Is a date for the evaluation of any nursing action included in the care plan ?
41. Is the patient's progress towards the goals evaluated both objectively and subjectively ?
42. Are the patient and/or his family included in evaluation ?
43. Are the care plans and nursing actions modified according to the rule of the evaluation ?

The self-completion nursing process scale

In the next part of the questionnaire there are 43 questions, which you should answer in relation to your experience in this particular ward. There are no right or wrong answers. The questions are simply intended to examine what is taking place in this ward. Your name is not required and your answers will be entirely confidential.

For each question please tick one of the four boxes, for example:

| yes | to some extent | no | don't know |
|-----|----------------------|----|---------------|
| | ✓ | | |

| | yes | to some extent | no | don't know |
|--|-----|----------------------|----|---------------|
|--|-----|----------------------|----|---------------|

GENERAL POINTS

- | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 1. Have any of the following been held to teach nursing process to ward staff: study days, lectures, discussions or tutorials ? | | | | |
| 2. Have all the permanent ward nursing staff attended at least one study day, lecture, discussion or tutorial on the nursing process? | | | | |
| 3. Is the nursing process taught to learners in the School of Nursing? | | | | |
| 4. Could the ward sister be described as democratic ie. does she involve nurses in decisions and does she delegate responsibility? | | | | |

NURSING ASSESSMENT

- | | | | | |
|--------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 5. Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients? | | | | |
| 6. Is an assessment made of new patients, prior to implementing nursing care? | | | | |
| 7. Is a written nursing history taken, using a systematic format? | | | | |
| 8. Is the nursing history usually taken within twenty-four hours of admission? | | | | |
| 9. Are nursing observations made of the patient's physical state ? | | | | |
| 10. Are nursing observations made of the patient's psychological state? | | | | |
| 11. Are nursing observations made of the patient's social and economic state? | | | | |
| 12. Are other information sources used in assessment eg. medical notes or district nurses' notes? | | | | |
| 13. Are nursing problems identified for all new patients, prior to implementing nursing care? | | | | |
| 14. Are potential and/or possible problems identified as well as actual problems? | | | | |
| 15. Is an attempt made to find the causes of the patient's problems eg. psychological, social etc.? | | | | |
| 16. Are the problem statements arranged in a hierarchy of importance ie. are priorities identified? | | | | |
| 17. Is the statement of problems made with the knowledge, understanding and agreement of the patient? | | | | |

PLANNING OF NURSING CARE

- | | | | | |
|-----------------------------------------------------------------------------------------|--|--|--|--|
| 18. Is a written care plan produced which incorporates patient's problems and/or needs? | | | | |
| 19. Is the care plan regularly updated? | | | | |

| | yes | to some extent | no | don't know |
|-------------------------------------------------------------------------------------------|-----|----------------------|----|---------------|
| 20. Are nursing care planning discussions, conferences or rounds held on the ward? | | | | |
| 21. Does the care plan include discharge planning? | | | | |
| 22. Are goals (nursing objectives) incorporated into the care plan? | | | | |
| 23. Does the statement of goals include both long-term and short-term goals? | | | | |
| 24. Are the goals agreed upon with the patient and/or his family? | | | | |
| 25. Are the goals always realistic? | | | | |
| 26. Are the goals patient centred i.e. written in terms of patient outcomes or behaviour? | | | | |
| 27. Do the goals include a time element? | | | | |
| 28. Are planned nursing actions incorporated into the care plan? | | | | |
| 29. Are planned nursing actions agreed upon with the patient and/or his family? | | | | |
| 30. Are planned nursing actions written very precisely and in detail? | | | | |

IMPLEMENTATION OF NURSING CARE

| | | | | |
|--------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 31. Is a system of patient allocation used throughout the ward? | | | | |
| 32. Is a nurse allocated to the same patient, or group of patients, for several days? | | | | |
| 33. Is the verbal handover (ward report) based on the care plans? | | | | |
| 34. Are the written nursing progress reports based on patient problems and goals? | | | | |
| 35. Is each nurse responsible for the written progress reports and verbal handover for her patient or group of patients? | | | | |
| 36. Do nurses take part in the medical rounds for their particular patients? | | | | |
| 37. Do both day and night nursing staff use the care plans as a basis for giving care? | | | | |

| | | | |
|-----|----------------------|----|---------------|
| yes | to some extent | no | don't know |
|-----|----------------------|----|---------------|

EVALUATION OF NURSING CARE

| | | | | |
|-------------------------------------------------------------------------------------------------|--|--|--|--|
| 38. Is systematic evaluation of care considered essential for all patients? | | | | |
| 39. Is evaluation recorded on either the care plan or the progress notes? | | | | |
| 40. Is a date for the evaluation of any nursing action included in the care plan? | | | | |
| 41. Is the patient's progress towards the goals evaluated both objectively and subjectively? | | | | |
| 42. Are the patient and /or his family included in evaluation? | | | | |
| 43. Are the care plans and nursing actions modified according to the results of the evaluation? | | | | |

Finally, I should be grateful for a few personal details.
These will, of course, be treated in complete confidence.

What is the name of this ward?

How long have you worked on this ward?

What is your current position? sister/ charge nurse ☐
 staff/ enrolled nurse ☐
 student/ pupil nurse ☐

Please list any educational qualifications you have:

Please list any nursing or other professional qualifications
you have: -----

IF YOU WISH TO MAKE ANY COMMENTS ON ANY PART OF THIS QUESTIONNAIRE,
PLEASE USE THE SPACE BELOW AND OVERLEAF:

CONFIDENTIAL

NURSING OFFICER'S WARD RATING SCALE.

Name of ward to be rated _____

Name of NO/ SNO _____

Please rate the ward concerned on the scale of 1 to 5 for each of the five listed aspects of the nursing process. Your scores should reflect your opinion of the extent to which the ward is successfully carrying out each aspect of the nursing process. Please note that your responses will remain entirely confidential.

For your guidance I have listed some of the points you should consider under each heading:

General Points - refers to attitudes, interest, knowledge, writing, teaching, use of literature etc.

Assessment - includes nursing history and observations, identification of patient problems etc.

Planning - includes preparation of care plan, setting goals (objectives), identifying care required in relation to problems, goal etc.

Implementation - concerned with the actual giving of care based on care plans etc.

Evaluation - includes identification of criteria for evaluation, documentation of evaluation on care plan, modification of care according to results of evaluation etc.

Please rate the ward for each item on the scale of 1 to 5 by placing ticks in the appropriate boxes:

| ASPECTS OF THE NURSING PROCESS | 1 Not at all | 2 Poor | 3 Fair | 4 Good | 5 Excellent |
|--------------------------------|-----------------|-----------|-----------|-----------|----------------|
| General Points | | | | | |
| Nursing Assessment | | | | | |
| Planning of Care | | | | | |
| Implementation of Care | | | | | |
| Evaluation of Care | | | | | |

Approximately how long (in months) have you had regular contact with this ward?

Approximately how much time each week do you spend in contact with this ward?

IF YOU WISH TO MAKE ANY GENERAL COMMENTS ABOUT THE WARD, PLEASE USE THE SPACE BELOW AND OVERLEAF:

APPENDIX PART 3. Number 10.TWO DAY WARD OBSERVATION / INFORMATION PROGRAMME TO EVALUATE USE OF
NURSING PROCESS

Name of observer _____

Name of ward _____

Date of observations _____

KEY TO CATEGORIES OF OBSERVATION/INFORMATION

- A. Information from Nursing Officer for the ward
- B. Information from school of nursing or in-service training department
- C. Observation of 3 handover reports - morning, lunchtime, and evening
- D. Focussed conversation with 5 randomly selected patients
- E. Observation of admission of one patient
- F. Inspection of randomly selected care plans, kardex and other nursing documentation for 5 patients
- G. Observation of 2 medical rounds - one consultant round and one houseman/ registrar round
- H. Focussed conversation with night nurses
- I. Observation of evaluation session with one patient (if this takes place)
- J. General observation of 4 nurses - suggest one sister, one qualified nurse, one senior learner, and one junior learner
- K. Focussed conversation with 3 visiting relatives

INSTRUCTIONS TO OBSERVER

1. During the two day observation period, answer as many questions as possible in each category on the 5 page "ward observation/information programme to evaluate use of nursing process."
2. At the end of the observation period work through the nursing process, measuring instrument item by item, using the "key to observation/information categories for each nursing process question", on page 6.
3. Refer to the relevant category or categories on the "observation/information programme", to obtain the score for each item. When 2 or more categories have been observed, use the most frequently occurring response as the score for that item.

A. INFORMATION FROM NURSING OFFICER FOR THE WARD

| | yes | to some extent | no | don't know |
|------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------|----|---------------|
| Have any of the following been held to teach nursing process to ward staff: study days, lectures, discussions or tutorials? | | | | |
| Have all the permanent ward nursing staff attended at least one study day, lecture, discussion or tutorial on the nursing process? | | | | |
| Is the nursing process taught to learners in the School of Nursing? | | | | |
| Could the ward sister be described as democratic ie. does she involve nurses in decisions and does she delegate responsibility? | | | | |
| 20. Are nursing care planning discussions, conferences or rounds held on the ward? | | | | |

B. INFORMATION FROM SCHOOL OF NURSING / IN-SERVICE

TRAINING DEPT.

| | yes | to some extent | no | don't know |
|---------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------|----|---------------|
| 1. Have any of the following been held to teach nursing process to ward staff: study days, lectures, discussions or tutorials? | | | | |
| 2. Have all the permanent ward nursing staff attended at least one study day, lecture, discussion or tutorial on the nursing process? | | | | |
| 3. Is the nursing process taught to learners in the School of Nursing? | | | | |

C. OBSERVATION OF 3 HANDOVER REPORTS — MORNING, LUNCHTIME AND EVENING

| | | yes | to some extent | no | don't know |
|------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----|----------------------|----|---------------|
| 1. Could the ward sister be described as democratic ie. does she involve nurses in decisions and does she delegate responsibility? | am lunch pm | | | | |
| 2. Are other information sources used in assessment eg. medical notes or district nurses' notes? | am lunch pm | | | | |
| 3. Are nursing problems identified for all new patients, prior to implementing nursing care? | am lunch pm | | | | |
| 4. Are potential and/or possible problems identified as well as actual problems? | am lunch pm | | | | |
| 5. Is an attempt made to find the causes of the patient's problems eg. psychological, social etc.? | am lunch pm | | | | |
| 6. Are the problem statements arranged in a hierarchy of importance ie. are priorities identified? | am lunch pm | | | | |
| 7. Are nursing care planning discussions, conferences or rounds held on the ward? | am lunch pm | | | | |

2. C.continued

31. Is a system of patient allocation used throughout the ward?
32. Is a nurse allocated to the same patient, or group of patients, for several days?
33. Is the verbal handover (ward report) based on the care plans?
34. Are the written nursing progress reports based on patient problems and goals?
35. Is a nurse responsible for the written progress report and verbal handover for her patient or group of patients?
38. Is systematic evaluation of care considered essential for all patients?
41. Is the patient's progress towards the goals evaluated both objectively and subjectively?
43. Are the care plans and nursing actions modified according to the results of the evaluation?

| yes | to some extent | no | don't know |
|-----|----------------------|----|---------------|
|-----|----------------------|----|---------------|

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D. FOCUSED CONVERSATION WITH 5 RANDOMLY SELECTED PATIENTS

1. Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients?
2. Is the statement of problems made with the knowledge, understanding and agreement of the patient?
4. Are the goals agreed upon with the patient and/or his family?
- Are planned nursing actions agreed upon with the patient and/or his family?
- Is systematic evaluation of care considered essential for all patients?
- Are the patient and/or his family included in evaluation?

| yes | to some exten | no | don't now |
|-----|---------------------|----|--------------|
|-----|---------------------|----|--------------|

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Page 3.

III. OBSERVATION OF ADMISSION OF ONE PATIENT

| | yes | to some extent | no | don't know |
|--------------------------------------------------------------------------------------------------------------|-----|----------------------|----|---------------|
| 5. Is a conscious effort made to create a positive atmosphere and a relationship of trust with new patients? | | | | |
| 6. Is an assessment made of new patients, prior to implementing nursing care? | | | | |
| 7. Is a written nursing history taken, using a systematic format? | | | | |
| 8. Is the nursing history usually taken within twenty-four hours of admission? | | | | |
| 9. Are nursing observations made of the patient's physical state? | | | | |
| 10. Are nursing observations made of the patient's psychological state? | | | | |
| 11. Are nursing observations made of the patient's social and economic state? | | | | |
| 12. Are other information sources used in assessment eg. medical notes or district nurses' notes? | | | | |
| 13. Are nursing problems identified for all new patients, prior to implementing nursing care? | | | | |
| 14. Are potential and/or possible problems identified as well as actual problems? | | | | |
| 15. Is an attempt made to find the causes of the patient's problems eg. psychological, social etc.? | | | | |
| 16. Are the problem statements arranged in a hierarchy of importance ie. are priorities identified? | | | | |

INSPECTION OF RANDOMLY SELECTED CARE PLANS, KARDEX, AND OTHER NURSING DOCUMENTATION FOR FIVE PATIENTS

| | yes | to some extent | no | don't know |
|--------------------------------------------------------------------------------|-----|----------------------|----|---------------|
| 6. Is an assessment made of new patients, prior to implementing nursing care? | | | | |
| 7. Is a written nursing history taken, using a systematic format? | | | | |
| 8. Is the nursing history usually taken within twenty-four hours of admission? | | | | |
| 9. Are nursing observations made of the patient's physical state? | | | | |
| 10. Are nursing observations made of the patient's psychological state? | | | | |
| 11. Are nursing observations made of the patient's social and economic state? | | | | |

12. Are other information sources used in assessment eg. medical notes or district nurses' notes?

13. Are nursing problems identified for all new patients, prior to implementing nursing care?

14. Are potential and/or possible problems identified as well as actual problems?

15. Is an attempt made to find the causes of the patient's problems eg. psychological, social etc.?

16. Are the problem statements arranged in a hierarchy of importance ie. are priorities identified?

18. Is a written care plan produced which incorporates patient's problems and/or needs?

19. Is the care plan regularly updated?

21. Does the care plan include discharge planning?

22. Are goals (nursing objectives) incorporated into the care plan?

23. Does the statement of goals include both long-term and short-term goals?

25. Are the goals always realistic?

26. Are the goals patient centred ie. written in terms of patient outcomes or behaviour?

27. Do the goals include a time element?

28. Are planned nursing actions incorporated into the care plan?

30. Are planned nursing actions written very precisely and in detail?

32. Is a nurse allocated to the same patient, or group of patients, for several days?

34. Are the written nursing progress reports based on patient problems and goals?

35. Is each nurse responsible for the written progress reports and verbal handover for her patient or group of patients?

38. Is systematic evaluation of care considered essential for all patients?

39. Is evaluation recorded on either the care plan or the progress notes?

40. Is a date for the evaluation of any nursing action included in the care plan?

41. Is the patient's progress towards the goals evaluated both objectively and subjectively?

43. Are the care plans and nursing actions modified according to the results of the evaluation?

OBSERVATION OF 2 MEDICAL ROUNDS — 1 CONSULTANT, 1 REG/H'MAN

| | yes | to some extent | no | don't know |
|---------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------|----|---------------|
| Could the ward sister be described as democratic ie. does she involve nurses in decisions and does she delegate responsibility? | con | | | |
| Do nurses take part in the medical rounds for their particular patients? | con | | | |
| | reg/h.man | | | |

FOCUSED CONVERSATION WITH NIGHT NURSES

37. Do both day and night nursing staff use the care plans as a basis for giving care?

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

OBSERVATION OF EVALUATION SESSION WITH ONE PATIENT

| | | | | |
|-------------------------------------------------------------------------------------------------|--|--|--|--|
| 38. Is systematic evaluation of care considered essential for all patients? | | | | |
| 39. Is evaluation recorded on either the care plan or the progress notes? | | | | |
| 40. Is a date for the evaluation of any nursing action included in the care plan? | | | | |
| 41. Is the patient's progress towards the goals evaluated both objectively and subjectively? | | | | |
| 42. Are the patient and /or his family included in evaluation? | | | | |
| 43. Are the care plans and nursing actions modified according to the results of the evaluation? | | | | |

GENERAL OBSERVATION OF 4 NURSES — sister, qualified nurse, senior & junior learner

| | | | | |
|------------------------------------------------------------------------------------------------------------------------------------|---|--|--|--|
| 4. Could the ward sister be described as democratic ie. does she involve nurses in decisions and does she delegate responsibility? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| 31. Is a system of patient allocation used throughout the ward? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| 32. Is a nurse allocated to the same patient, or group of patients, for several days? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| 35. Is each nurse responsible for the written progress reports and verbal handover for her patient or group of patients? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| 20. Are nursing care planning discussions, conferences or rounds held on the ward? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |

FOCUSED CONVERSATION WITH 3 VISITING RELATIVES

| | | | | |
|---------------------------------------------------------------------------------|---|--|--|--|
| 24. Are the goals agreed upon with the patient and/or his family? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| 29. Are planned nursing actions agreed upon with the patient and/or his family? | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| 42. Are the patient and /or his family included in evaluation? | 1 | | | |
| | 2 | | | |
| | 3 | | | |

KEY TO OBSERVATION/ INFORMATION CATEGORIES FOR EACH NURSING PROCESS QUESTION

- | | |
|--------------|------------|
| 1. A.B. | 41. C.F.I. |
| 2. A.B. | 42. D.I.K. |
| 3. A.B. | 43. C.F.I. |
| 4. A.C.G.J. | |
| 5. D.E. | |
| 6. E.F. | |
| 7. E.F. | |
| 8. E.F. | |
| 9. E.F. | |
| 10. E.F. | |
| 11. E.F. | |
| 12. C.E.F. | |
| 13. C.E.F. | |
| 14. C.E.F. | |
| 15. C.E.F. | |
| 16. C.E.F. | |
| 17. D. | |
| 18. F. | |
| 19. F. | |
| 20. A.C.J. | |
| 21. F. | |
| 22. F. | |
| 23. F. | |
| 24. D.K. | |
| 25. F. | |
| 26. F. | |
| 27. F. | |
| 28. F. | |
| 29. D.K. | |
| 30. F. | |
| 31. C.J. | |
| 32. C.F.J. | |
| 33. C. | |
| 34. C.F. | |
| 35. C.F.J. | |
| 36. G. | |
| 37. H. | |
| 38. C.D.F.I. | |
| 39. F.I. | |
| 40. F.I. | |

Written explanation of nursing process study given
to sisters.NURSING RESEARCH

As part of the requirements for my fourth year course work, I have to design and implement a small research project. I have decided to study a few aspects of the organisation of patient care on a random selection of wards at Charing Cross hospital.

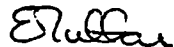
In order to do this I have two short questionnaire s taking ten minutes each, twenty minutes in total. These need to be given to all the nurses on a 'late' and 'early' duty over a period of two days. If possible I would like to see the nurses in groups, no larger than four at a time. Also I would like to take them into a side room where they will be disturbed as little as possible.

To improve the reliability of the research a short . observation checklist will be filled in by myself and one other researcher who will be present for a short period of one day.

Although this is only a basic and small scale piece of research I do believe it will be useful. On completion of the project a report of findings will be made to those concerned with its implementation.

Many thanks for your help.

Yours sincerely,



E.M. TUTTON, 4th Year Student Nurse,

BSc/SRN, Charing Cross Hospital and Chelsea College.

APPENDIX PART 3. Number 12.Letters of thanks sent by research assistant
to nursing officers and sisters on completion
of data collection at Hospital 3.

DEPARTMENT OF NURSING STUDIES.

Chelsea College
University of London

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

01-351 2488

Manresa Road,
London SW3 8LX

Ward.....

.....Hospital

.....

London.....

Date:

Dear

Thank you very much for the time and
assistance you have given me. Your help has
been greatly appreciated.

On completion of the research project
a summary will be made available to you. The
full report will be given to Miss Russell,
Nursing Officer, at the end of May 1982.

Yours sincerely,

E.M. Tutton
Student BSc Nursing/SRN.

[illegible]

ACTION PLANPATIENT'S NAMEWARDDATE OF ADMISSIONCONSULTANT

| | DATE | DATE | DATE |
|----------------------------------------|------|------|------|
| PERSONAL HYGIENE | | | |
| NUTRITION | | | |
| MOBILITY | | | |
| REST/SLEEP | | | |
| CARE OF SKIN | | | |
| DRESSINGS AND SPECIAL TREATMENTS | | | |
| OBSERVATION OF PATIENT | | | |
| ELIMINATION | | | |
| ADDITIONAL INSTRUCTIONS | | | |
| NAME OF NURSE | | | |

NURSING CARE PLAN SHEET

HOSPITAL

1144

PAGE NO. _____ WARD _____
CONSULTANT _____

PART A NURSING CARE PLAN (PLEASE USE PENCIL)

1 SPECIAL OBSERVATIONS

DIAGNOSIS

PRE-OP PREPARATION

HOSP NO

SURNAME

FIRST NAME

DATE OF BIRTH

AGE

M/F

M/S/W

R/L

PART C. PATIENT DETAILS

ADDRESS

OCCUPATION

TEL NO

NEXT OF KIN

IN EMERGENCY CONTACT

TEL NO (HOME)

(WORK)

RELATIONS NOTIFIED OF CONDITION

DATE

TIME

VALUABLES IN SECURITY

YES/NO

IDENTIFICATION BRACELET

YES/NO

DENTURES

PROSTHESIS SPECIFY

LANGUAGES SPOKEN

PATIENTS RELATIVES REQUESTED

RELIGIOUS OBSERVANCES IN CASE OF EXTREME ILLNESS

DATE

YES/NO

GENERAL PRACTITIONER

DISTRICT NURSE/HV

MEDICAL SOCIAL WORKER

PHYSIOTHERAPIST

PART B. PROBLEMS & NEEDS

OPERATIONS PERFORMED DATE

2 T R

3 BLOOD PRESSURE

4 FLUID INTAKE

5 OUT-PUT

6 WEIGHT

7 BATHING

8 TURNING

9 ORAL CARE

10 ACTIVITY

11 FEEDING

12 SURGICAL DRESSING

13 INTRAVENOUS

14 SPECIAL CARE - TESTS

EG INHALATIONS

15 CATHETER CARE

ALLERGIES

CONT'D OVER

Appendix Part 3 Number 14 Final version of:

THE NURSING PROCESS MEASURING SCALE (BROOKING 1986)

Ward nurses' self-rating scale

The scale measures how much nursing process is being used in one ward. It is not a test of your knowledge or practice and there are no right or wrong answers. Your name is not required and your answers will be entirely confidential. Please answer each question in relation to your own experiences on this ward. Please tick only one box for each question.

What is the name of this ward?

How long have you worked on this ward?

What is your current grade?

sister/charge nurse

☐

staff/enrolled nurse

☐

student/pupil nurse

☐

Please list any educational qualifications you have

Please list any nursing or other professional qualifications you have

.....

What is today's date?

| | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | no, never |
|----|------------------------------|--------------------------|------------------------|--------------------|---------------|--------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |

| | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | no, never |
|--------------------------------------------------------------------------------------------------|------------------------------|--------------------------|------------------------|--------------------|---------------|--------------|
| 24 Are written nursing progress reports based on patients' problems and goals? | | | | | | |
| 25 Are nurses responsible for written and verbal reports on their patients? | | | | | | |
| 26 Do nurses take part in medical rounds for their patients? | | | | | | |
| 27 Are care plans used both day and night as a basis for giving care? | | | | | | |
| 28 Is systematic evaluation of care carried out for all patients? | | | | | | |
| 29 Is evaluation recorded on the care plans or progress notes? | | | | | | |
| 30 Are dates for the evaluation of patients' problems included in the care plans? | | | | | | |
| 31 Are objective measures of patient progress used on the ward? | | | | | | |
| 32 Are patients and/or relatives included in evaluation? | | | | | | |
| 33 Are care plans modified according to the results of evaluation? | | | | | | |
| 34 Have study days or lectures been held to teach nursing process to permanent ward nurses? | | | | | | |
| 35 Have all permanent ward nurses attended at least one study day or lecture on nursing process? | | | | | | |
| 36 Is nursing process taught to learners in the school of nursing? | | | | | | |
| 37 Does the sister/charge nurse involve nurses in decision-making and delegate responsibility? | | | | | | |

IF YOU WISH TO COMMENT ON THE USE OF NURSING PROCESS IN THIS WARD, PLEASE WRITE ON THE BACK OF THIS FORM.

Appendix Part 3 Number 15 Final version of:

THE NURSING PROCESS MEASURING SCALE (BROOKING 1986)

Ward observation scale

Name of observer

Name of ward

Dates and times of observations

Instructions to observer

- 1 During the two day observation period, answer as many questions as possible in each category on the ward observation scale.
- 2 At the end of the observation period work through a copy of the nurses' self-rating scale item by item using the "key to observation/information categories for each nursing process item" on the last page.
- 3 Refer to the relevant category or categories in the ward observation scale to obtain the score for each item. When two or more categories have been observed use the most frequently occurring response, or average response, as the score for that item.

| CATEGORY A. INFORMATION FROM SENIOR NURSE FOR THE WARD | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------|-----------------------|---------------------|--------------------|---------------|-------|
| 11 | Are nursing care planning discussions or rounds held on the wards? | | | | | | |
| 34 | Have study days or lectures been held to teach nursing process to permanent ward nurses? | | | | | | |
| 35 | Have all permanent ward nurses attended at least one study day or lecture on nursing process? | | | | | | |
| 36 | Is nursing process taught to learners in the school of nursing? | | | | | | |
| 37 | Does the sister/charge nurse involve nurses in decision-making and delegate responsibility? | | | | | | |
| CATEGORY B. INFORMATION FROM SCHOOL OF NURSING/IN-SERVICE TRAINING DEPARTMENT | | | | | | | |
| 34 | Have study days or lectures been held to teach nursing process to permanent ward nurses? | | | | | | |
| 35 | Have all permanent ward nurses attended at least one study day or lecture on nursing process? | | | | | | |
| 36 | Is nursing process taught to learners in the school of nursing? | | | | | | |

CATEGORY C. OBSERVATION OF 3 HANDOVER REPORTS -
MORNING, LUNCHTIME, EVENING

| | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|----|---------------------------------------------------------------------------------------------|---------------------------|--------------------------|------------------------|--------------------|---------------|-------|
| 4 | Are nursing problems identified and written down for all new patients? | am lunch pm | | | | | |
| 5 | Are potential and/or possible problems identified as well as actual problems? | am lunch pm | | | | | |
| 6 | Is an attempt made to find and record the cause of patients' problems? | am lunch pm | | | | | |
| 7 | Are problem statements arranged in order of priority? | am lunch pm | | | | | |
| 11 | Are nursing care planning discussions or rounds held on the wards? | am lunch pm | | | | | |
| 21 | Are patient allocation or primary nursing used throughout the ward at all times? | am lunch pm | | | | | |
| 22 | Are nurses allocated to the same patients for several days? | am lunch pm | | | | | |
| 23 | Are care plans used for the verbal ward handover reports? | am lunch pm | | | | | |
| 24 | Are written nursing progress reports based on patients' problems and goals? | am lunch pm | | | | | |
| 25 | Are nurses responsible for written and verbal reports on their patients? | am lunch pm | | | | | |
| 28 | Is systematic evaluation of care carried out for all patients? | am lunch pm | | | | | |
| 31 | Are objective measures of patient progress used on the ward? | am lunch pm | | | | | |
| 33 | Are care plans modified according to the results of evaluation? | am lunch pm | | | | | |
| 37 | Does the sister/charge nurse involve nurses in decision-making and delegate responsibility? | am lunch pm | | | | | |

PATIENTS - AS DIFFERENT FROM EACH OTHER AS POSSIBLE

| | | always/ excellent | usually/ good | often/ fair | poor | know | |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------|----------------|------|------|--|
| 8 | Are problem statements made with the knowledge and agreement of patients and/or relatives? Eg. "Have the nurses discussed the nature of your problems/nursing needs?" - repeat re relatives. | 1 2 3 4 5 | | | | | |
| 15 | Are goals agreed upon with patients and/or relatives? Eg. "Have the nurses discussed with you or sought your agreement about the aims/goals/objectives of your care?" - repeat re relatives. | 1 2 3 4 5 | | | | | |
| 19 | Are planned nursing actions agreed upon with patients and/or relatives? Eg. "Have the nurses discussed with you their plans for your care?" - repeat re relatives. | 1 2 3 4 5 | | | | | |
| 32 | Are patients and/or relatives included in evaluation? Eg. "Have the nurses discussed your progress with you?" - repeat re relatives. | 1 2 3 4 5 | | | | | |
| CATEGORY E. OBSERVATION OF ADMISSION OF 2 OR 3 PATIENTS, INCLUDING OBSERVATIONS OF 2 OR 3 NEWLY ADMITTED PATIENTS | | | | | | | |
| 1 | Is an assessment made of new patients, prior to planning and giving care? | 1 2 3 | | | | | |
| 2 | Is a written nursing history taken, using a specific form? | 1 2 3 | | | | | |
| 3 | Does the nursing assessment begin within 24 hours of admission? | 1 2 3 | | | | | |
| 4 | Are nursing problems identified and written down for all new patients? | 1 2 3 | | | | | |
| 5 | Are potential and/or possible problems, identified as well as actual problems? | 1 2 3 | | | | | |

CATEGORY E CONTINUED

| | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------|--------------------------|------------------------|--------------------|---------------|-------|
| 6 | Is an attempt made to identify and record the causes of patients' problems? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| 7 | Are problem statements arranged in order of priority? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| <u>CATEGORY F. INSPECTION OF RANDOMLY SELECTED NURSING DOCUMENTATION FOR 5 PATIENTS</u> | | | | | | | |
| 1 | Is an assessment made of new patients, prior to planning and giving care? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 2 | Is a written nursing history taken using a specific form? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 3 | Does the nursing assessment begin within 24 hours of admission? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 4 | Are nursing problems identified and written down for all new patients? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 5 | Are potential and/or possible problems identified as well as actual problems? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 6 | Is an attempt made to find and record the causes of patients' problems? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |

CATEGORY F CONTINUED

| | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|----|------------------------------------------------------------------------------------|------------------------------|--------------------------|------------------------|--------------------|---------------|-------|
| 7 | Are the problem statements arranged in order of priority? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 9 | Are written care plans produced which incorporate patients' problems and/or needs? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 10 | Are care plans updated daily? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 12 | Do care plans include discharge planning? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 13 | Are goals (nursing objectives) incorporated into the care plans? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 14 | Do the goals include both long and short term goals? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 16 | Are goals written in terms of patient outcomes ie. changes in the patient? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 17 | Do goals specify a time element for achievement? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |

CATEGORY F CONTINUED

| | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|----|----------------------------------------------------------------------------------|------------------------------|--------------------------|------------------------|--------------------|---------------|-------|
| 18 | Are problem-oriented planned nursing actions included in care plans? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 20 | Are planned nursing actions written in detail? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 21 | Are patient allocation or primary nursing used throughout the ward at all times? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 22 | Are nurses allocated to the same patients for several days? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 23 | Are care plans used for the verbal ward handover reports? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 24 | Are written nursing progress reports based on patients' problems and goals? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 25 | Are nurses responsible for written and verbal reports on their patients? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 27 | Are care plans used both day and night as a basis for giving care? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |

CATEGORY F CONTINUED

| | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|---------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------|--------------------------|------------------------|--------------------|---------------|-------|
| 28 | Is systematic evaluation of care carried out for all patients? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 29 | Is evaluation recorded on the care plans or progress notes? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 30 | Are dates for the evaluation of patients' problems included in the care plans? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 31 | Are objective measures of patient progress used on the ward? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| 33 | Are care plans modified according to the results of evaluation? | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| | | 4 | | | | | |
| | | 5 | | | | | |
| CATEGORY G. OBSERVATION OF 2 MEDICAL ROUNDS | | | | | | | |
| 26 | Do nurses take part in medical rounds for their patients? | consultant | | | | | |
| | | reg/h'man | | | | | |
| 37 | Does the sister/charge nurse involve nurses in decision-making and delegate responsibility? | consultant | | | | | |
| | | reg/h'man | | | | | |

| CATEGORY H. FOCUSED CONVERSATION WITH NIGHT NURSES | | yes, always/ excellent | yes, usually/ good | yes, often/ fair | sometimes/ poor | don't know | never |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------|------------------|-----------------|------------|-------|
| 27 | Are care plans used both day and night as a basis for giving care? | | | | | | |
| CATEGORY I. OBSERVATION OF AND FOCUSED DISCUSSION WITH 4 NURSES | | | | | | | |
| 11 | Are nursing care planning discussions or rounds held on the ward? | sister qualified | | | | | |
| | | senior learner | | | | | |
| | | junior learner | | | | | |
| 21 | Are patient allocation or primary nursing used throughout the ward at all times? | sister qualified | | | | | |
| | | senior learner | | | | | |
| | | junior learner | | | | | |
| 22 | Are nurses allocated to the same patients for several days? | sister qualified | | | | | |
| | | senior learner | | | | | |
| | | junior learner | | | | | |
| 25 | Are nurses responsible for written and verbal reports on their patients? | sister qualified | | | | | |
| | | senior learner | | | | | |
| | | junior learner | | | | | |
| 37 | Does the sister/charge nurse involve nurses in decision-making and delegate responsibility? | sister qualified | | | | | |
| | | senior learner | | | | | |
| | | junior learner | | | | | |
| CATEGORY J. FOCUSED CONVERSATION WITH 3 VISITING RELATIVES | | | | | | | |
| 8 | Are problem statements made with the knowledge and agreement of patients and/or relatives? (see Category D for example) | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| 15 | Are goals agreed upon with patients and/or relatives? (see Category D for example) | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| 19 | Are planned nursing actions agreed upon with patients and/or relatives? (see Category D for example) | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |
| 32 | Are patients and/or relatives included in evaluation? (see Category D for example) | 1 | | | | | |
| | | 2 | | | | | |
| | | 3 | | | | | |

Key to observation/information categories for each nursing process item:

| | | | |
|----|-------|----|---------|
| 1 | E F | 19 | D J |
| 2 | E F | 20 | F |
| 3 | E F | 21 | C F I |
| 4 | C E F | 22 | C F I |
| 5 | C E F | 23 | C F |
| 6 | C E F | 24 | C F |
| 7 | C E F | 25 | C F I |
| 8 | D J | 26 | G |
| 9 | F | 27 | F H |
| 10 | F | 28 | C F |
| 11 | A C I | 29 | F |
| 12 | F | 30 | F |
| 13 | F | 31 | C F |
| 14 | F | 32 | D J |
| 15 | D J | 33 | C F |
| 16 | F | 34 | A B |
| 17 | F | 35 | A B |
| 18 | F | 36 | A B |
| | | 37 | A C G I |